

Historic Context of A-frame Architecture in Boulder County

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Boulder County Land Use Department

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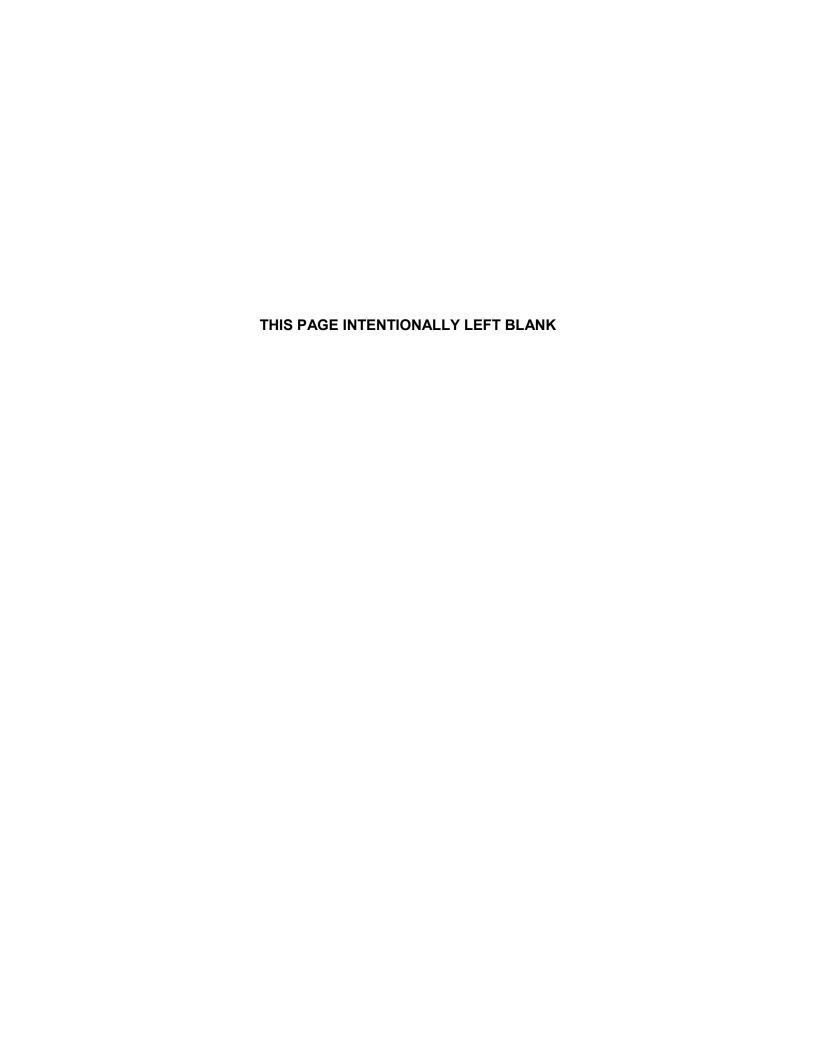


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Photo cover: A-frame at 833 Hemlock Drive, Unincorporated, Boulder County, provided by owner Catherine Faughnan.





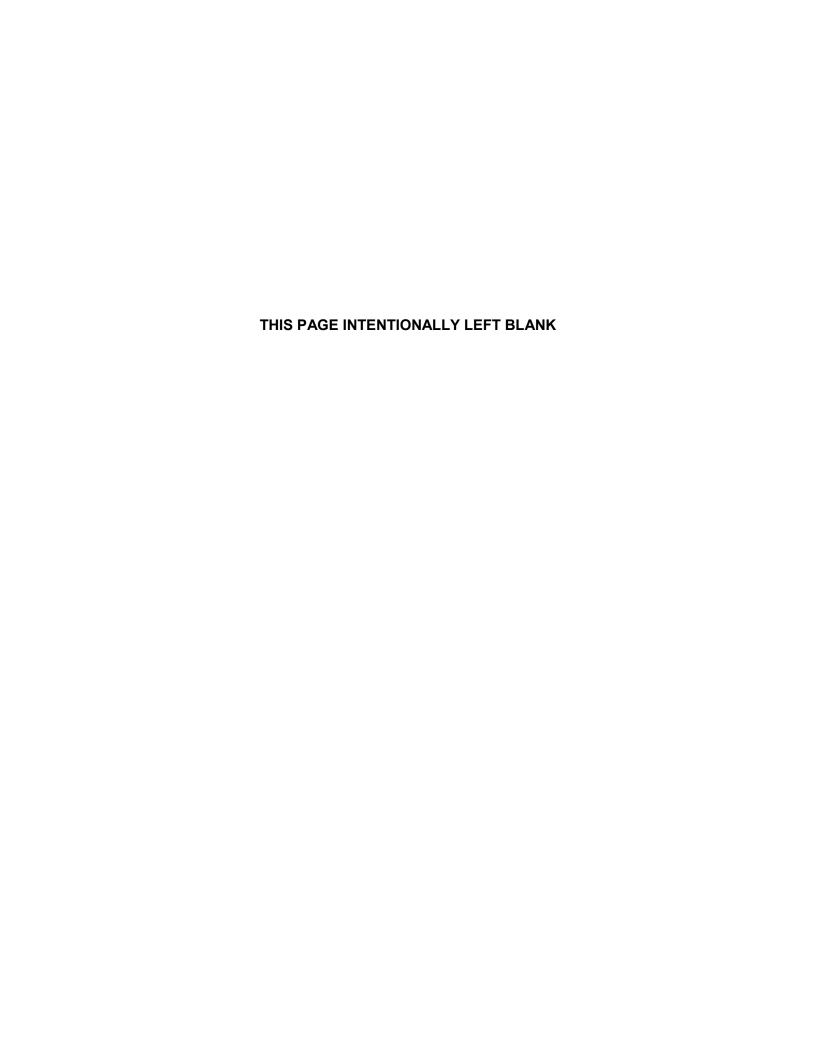
1. Introduction

We have all seen them. Their distinctive roof line peaking over the evergreens and pines. Especially in Colorado, where their steep gable seems to mimic the shape of the mountains and the form sends connotations of cozy après ski fires. The A-frame. Most communities in Colorado can boast to having one, and everybody knows where it is, likely using it as a way-finding and orienting feature. These memorable forms dot the Colorado landscape, and not without reason. A-frames were a quick, easy, and affordable way for individuals to construct their own vacation home. The snow-sloughing roofs meant the buildings could withstand the heavy Colorado snowfall with minimal maintenance from their oftenseasonal homeowners. In addition, the strong yet light-weight form was relatively easy to transport over mountain roads and build in often secluded locations. The form became exceedingly popular nationally, particularly in mountainous areas. The 1960s and 1970s saw the largest number of A-frames, and spotting an example today seems to instantly transport one back to the time of polyester and shag carpets. It is, perhaps, these associations that contributed to a stigma around the A-frame as outdated and no longer en voque. You no longer see many commercial buildings using the form to attract customers, and while A-frames are still occasionally constructed residentially, the form does not nearly benefit from the same level of popularity it once held. The A-frames from the 1960s and 1970s, however, remain as a snapshot not only of the modern design aesthetics valued at the time, but also of the underlying cultural and societal themes of its time.

The history of the A-frame has been studied at a national level, with early architect-designed examples like the Leisure House and the Betty Reese House featured in popular magazines and newspapers like *Interiors* and the *New York Times*. As a recent-past resource, however, not much information is located in the public record regarding A-frame architecture on the local level. Boulder County alone has 180 known extant A-frame buildings, with at least one-third of those building already 50 years old. When buildings reach that 50-year mark, staff at the Boulder County Land Use historic preservation department begin reviewing applications for exterior alterations and demolitions. It quickly became evident that the staff needed more information about A-frames, and particularly those in Boulder County. The County sought and was awarded a Certified Local Government grant from History Colorado in early 2017 to undertake a context study of A-frame architecture within Boulder County. Architectural and Cultural History Professionals, LLC. (ARCH Professionals), partnering with Mead & Hunt, Inc. (Mead & Hunt), was selected to complete the study.

This report is organized into several different sections, with a national and local context of A-frames in Boulder County, as well as brief contexts of tourism and the post-World War II (postwar) era in the county. The discussion of A-frames at a local level includes known practicing architects; addresses commercial, ecclesiastic, and residential A-frame architecture; and explores local kit and prefabricated suppliers. In addition, the geographic distribution and building periods of A-frames within the county is also addressed. Finally, National Register of Historic Places (National Register) Criteria and Boulder County Landmark Criteria for A-frame buildings within Boulder County is presented, along with typical variations, alterations, common features, and materials. The document concludes with a section addressing future recommendations.



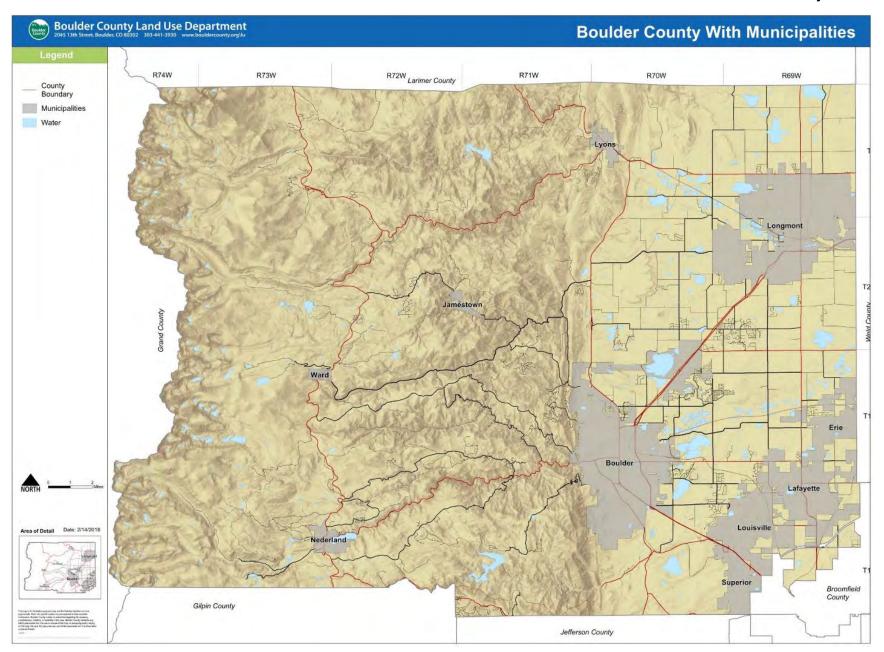


2. Project Area

Boulder County, which covers 474,324.23 acres, or 741.14 square miles, contains several incorporated municipalities, many of which have their own historic preservation ordinances and studies. As this study is sponsored by Boulder County, it mainly focuses on the unincorporated areas. Unincorporated Boulder County covers 422,105.94 acres, or 659.55 square miles. The records retrieved from the Boulder County Assessor to assist with this project, however, include incorporated and unincorporated areas. As a result, the total number of A-frames evaluated includes those within incorporated areas.

Boulder County is located on the eastern edge of the Rocky Mountains. Multiple U.S. Geological Survey (USGS) Quadrangle maps cover Boulder County, including the Hygiene, Lyons, Raymond, Allenspark, Ward, Gold Hill, Boulder, and Niwot Quadrangles. Portions of the Longmont, Berthoud, Carter Lake, Pinewood Lake, Panorama Peak, Longs Peak, McHenrys Peak, Isolation Peak, Monarch Lake, East Portal, Nederland, Tungsten, Eldorado Springs, Louisville, Lafayette, and Erie Quadrangles also cover portions of Boulder County. Boulder County is located in Townships 1N, 2N, and 3N; Ranges 69W, 70W, 71W, 72W, 73W, and part of 74W. The county also covers Township 1S; Ranges 70W, 71W, and portions of Ranges 69W, 72W, and 73W. Map 1 shows all of Boulder County, with the incorporated municipalities identified.





Map 1. Map of Boulder County showing municipalities.



3. Research Design and Methods

To begin this project, a historic context of A-frame architecture on a national level was developed. Mead & Hunt researched the historical development of the unique architectural type on a national scale, to better inform how the A-frame form arrived in Boulder County. Both primary and secondary resources from the Denver Public Library, the Boulder Carnegie Branch Library for Local History and Archives, and the Auraria Library were referenced. Chad Randl's 2004 exhaustive book *A-frame* provided a large amount of information on the national context of A-frame architecture, as well as provided clues for the type of businesses, including lumber companies and franchises, to identify locally.

Next, A-frame architecture within Boulder County was researched on a general level by ARCH Professionals. This included utilizing primary and secondary resources. In 2000 a Historic Context and Survey of Modern Architecture in Boulder, Colorado 1947-1977 by Paglia, Segel, and Wray was completed. Although this document focused on 27 specific properties from that era, none of which were A-frames, it did provide a good context of Boulder and Boulder County at the time, as well as identified key architects and architectural figures working in Boulder. Another valuable document that was consulted was the Historic Context and Survey of Post World-War II Residential Architecture, Boulder, Colorado by Jennifer Bryant and Carrie Schomig. Again, although it was not directly related to A-frame architecture, it provided a great context and insight into the growth and factors at play in Boulder County in the postwar period. Primary materials were consulted at the Boulder Carnegie Library for Local History as well as the Denver Public Library Western History and Genealogy Department. Because the A-frame form is part of the recent past, there was not a great deal of information previously collected about this type on a local level. The Boulder Daily Camera newspaper and its Sunday Focus Magazine publication, available at the Boulder Carnegie Library for Local History, proved useful in highlighting new architectural works at the time, as well as provided advertisements and features on A-frame providers in the area. In addition, advertisements for mountain developments on which to build your second/vacation home were also included in the newspaper and provided information and background regarding the geographic concentrations of A-frames. Vertical files with newspaper clippings at the Boulder Carnegie Library for Local History also provided insight on architects, subdivisions where A-frames were constructed, and tourism in the postwar era. Once a general context was established, more detailed investigations could occur.

The study of A-frame architecture in Boulder County was largely informed by the data provided by the current and past Boulder County Assessor's records. In its records, the Boulder County Assessor's Office identified properties that it classified over the years as A-frames. This list built the basis for those properties referenced in this study. Additional A-frames identified by county workers, various community members, and through newspaper articles were added to the master list of A-frames. As the study progressed, it was determined that certain properties on this list were not actually A-frames by definition, or were misidentified in the assessor's records as A-frames. Only extant A-frames were included in this list. If there was not enough photographic or satellite imagery support to definitively see that there was no A-frame on a property, however, it was identified as an A-frame in the Assessor's data, and the property remained in the final count. Appendices A and B present a spreadsheet and photographs of the known A-frames in Boulder County. Assessor's current photographs, Boulder County oblique aerial imagery, and photographs from the old assessor's appraisal cards were gathered for the properties. When available, the appraisal cards, often with the contemporary black and white photographs and names of



early and/or original owners, were also gathered. These assessor's appraisal cards are housed at Boulder Carnegie Branch Library for Local History.

Boulder County Land Use staff pulled building permits for each property to determine any architects, contractors, or suppliers constructing A-frame buildings in the county. Although many of the building permits did not include any pertinent information, this effort did reveal a few architects who were then researched further at the Boulder Carnegie Library. In addition, the name Delta Vacation Homes, or Delta Prefabricated Homes, continually appeared during the building permit search. As it became increasingly clear that Delta Vacation Homes played a large role in the history of A-frame architecture within the county, the company was researched further. ARCH Professionals identified and interviewed descendants of Delta Vacation Home founder, Lawrence "Bud" Stoecker, in order to learn about the company, its founder, the process of buying an A-frame home from Delta Vacation Homes, and the variety of models offered by the company. The insights garnered from these interviews were invaluable. The family members also provided copies of marketing and company materials. ARCH Professionals then worked with the family to donate the oral history interview with Bud's son, Steve Stoecker, to the Boulder Carnegie Library for Local History, as well as donate materials regarding Delta Vacation Homes to their archive.

While the national and local context were being developed, Boulder County Land Use staff developed a webpage with a questionnaire that was sent to owners of A-frame buildings in the county. The webpage informed owners of the effort underway to develop a historic context for A-frame architecture in Boulder County, and solicited answers to questions regarding their A-frames. The questions posed to property owners on the webpage included:

- 1. What year was your A-frame built?
- 2. Are you the original owner?
- 3. Who was the builder and/or architect, or was it a DIY project?
- 4. Was the A-frame prefabricated or from a kit and, if so, from where?
- 5. Do you know of any major changes or alterations from the original design?
- 6. Are there interesting facts or unique features about your A-frame you'd like to share?
- 7. Would you consider being interviewed and/or have your A-frame photographed?¹

The intent was that homeowners would come forward and provide insight into the history of their building that might help enlighten the project team as to how a typical A-frame building in Boulder County came to be. In total, eight responses were received that provided some information on builders and kits utilized by Boulder A-frame homeowners. Additionally, some of these responses contained photographs, including interior views of particular A-frames. Several respondents provided lengthier interviews about their A-frame and granted permission for the project team to visit their property in person, which proved to be very helpful during the field work to observe a few A-frames up-close. Responses received to the survey are provided in Appendix C.

¹ "Historic Context Study on A-frame Architecture in Boulder County," *Boulder County* (blog), accessed November 17, 2017, https://www.bouldercounty.org/property-and-land/land-use/historic-preservation/a-frame-architecture-study/.

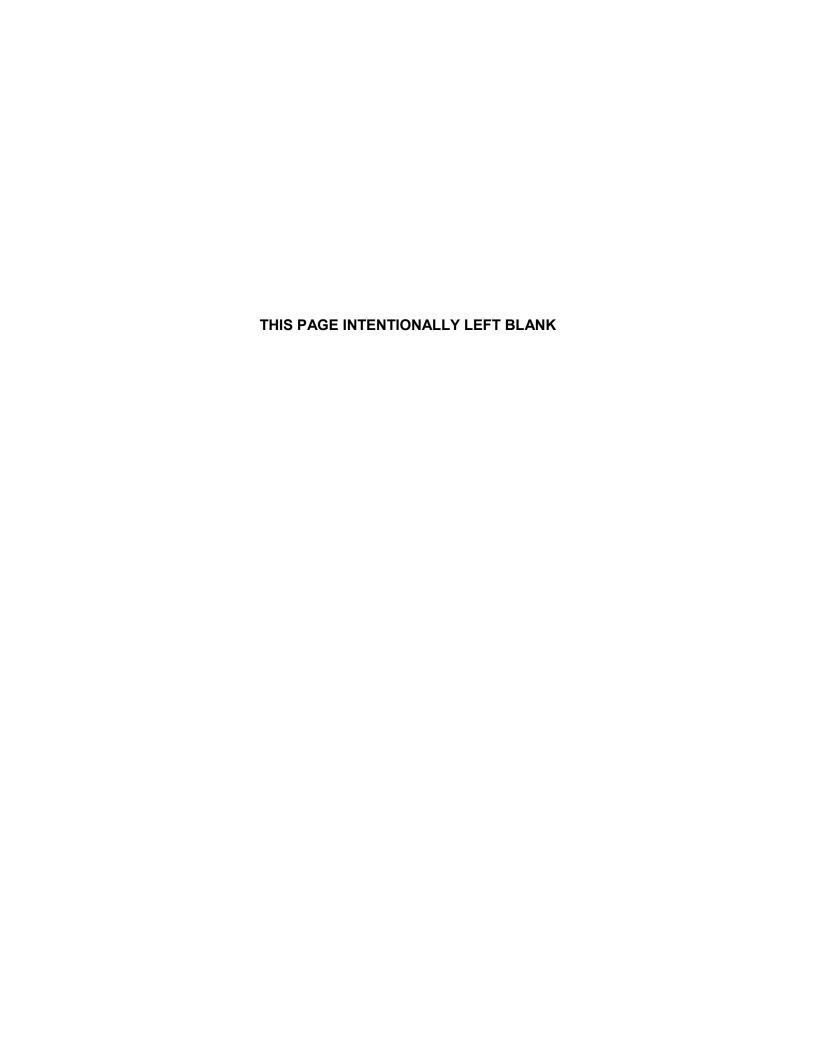


A survey of each A-frame resource in the county was not conducted; rather, selective examples were visited in the field. Those properties visited in the field were chosen based on geographic concentrations of A-frames as exemplified in the maps of the known A-frames originally produced by Boulder County, as well as those that could likely be seen from the road right-of-way. Field locations were also based on the responses received from property owners to the county questionnaires. Several properties owners gave the project team permission to enter their property and photograph their A-frame. In total, 25 A-frames were visited in the field.

With the additional insight gained from the field work, as well as the available photography of other A-frames in the county, ARCH Professionals and Mead & Hunt created a typology classification system so common forms could be identified. Typical alterations, such as the inclusion of dormers or the construction of additions, were noted, as well as common materials. Although additional types, variations, and unique materials beyond those identified through the field survey effort may exist, the information available from the Boulder County Assessor's records and the field work was sufficient to identify the major range of typologies and variations present within the county.

The goal of the project was not to intensively document each A-frame in Boulder County, but rather to create an understanding of the typical and exceptional types of A-frames found so Boulder County Land Use staff can make informed landmark eligibility decisions regarding future alteration applications for A-frame buildings. To that end, Mead & Hunt, informed by the historic context, field work, known examples, typologies, and typical modifications, set about developing National Register eligibility criteria for A-frame buildings within Boulder County.





4. A-frame Architecture on a National Stage

A. Historic antecedents

Triangular, A-frame-like buildings can be found in a variety of iterations throughout the world, and traces of such buildings can be found as far back in time as the Neolithic age. Earlier cultures were likely drawn to triangular buildings for some of the same reasons postwar Americans found the A-frame so appealing: the ease of construction, the availability of materials, and the strength of the building itself.

(1) Asian and Polynesian forms

Some of the earliest such buildings might be traced to Neolithic China, where pits may have been covered by rafter-like poles, creating triangular shelters. In Ancient Japan, tradition holds that prehistoric inhabitants built triangular buildings called *tenchi-kongen*, or "a palace construction of heaven earth." These were constructed of two vertical pillars connected by a ridgepole. Intersecting rafters ran along the ridgepole and were tied together by horizontal members that supported an outer layer of thatching material. This construction form continues to be seen in religious buildings, such as the Shinto shrines at Ise, Japan.²

In addition to their strength and ease of construction, triangular buildings often hold important cultural meaning as well. In Japanese tradition, for example, the height and decoration of such a building was understood to be a marker of wealth and status. In New Guinea and western Polynesia, some anthropologists argue that the large thatched roofs of triangle-shaped residential, ceremonial, and communal buildings represent the importance of sea-faring to the island cultures. The sagging saddleback ridges and outward-sloping gables of many of these buildings may represent wind-filled sails.³

(2) European forms

Early European cultures also had their own versions of triangular construction. Based on archeological evidence dating as far back as the Stone Age, prehistoric Europeans constructed buildings using "primary tong-support frameworks." These frameworks were made of two sets of inclined timbers, which crossed each other at the point where they supported the ridgepole. The cruck was a medieval triangular form, constructed of naturally curved timbers split in half. The hewn sides of the inclined poles faced one another and were secured by the ridgepole. Larger buildings included collar beams, added for additional support. As the form evolved, vertical walls were added, and the cruck became the "basis for roof systems used to cover great halls, churches, barns, and houses" (see Figure 1).⁴ Post-and-truss construction replaced the cruck as timber supplies thinned and buildings grew larger and added second stories.



² Chad Randl, *A-frame* (New York: Princeton Architectural Press, 2004), 16-17.

³ Randl. 17.

⁴ Randl, 19–20.

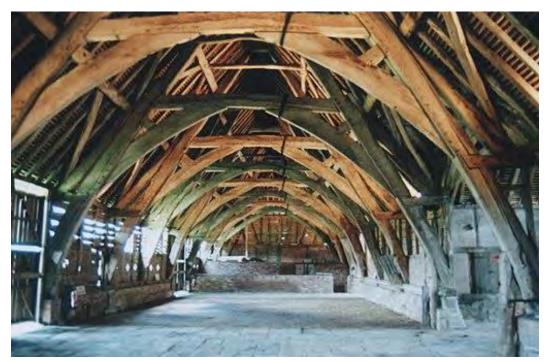


Figure 1. Cruck framing as seen in the Leigh Court Tithe Barn in Worcester, England. Note how the cruck beams are A-shaped timbers that extend short foundation walls.⁵

Although older buildings continued to be used as cottages, farm buildings, and ceremonial structures, after the introduction of post-and-truss construction, triangular forms largely fell out of fashion in Europe until the late nineteenth and early twentieth centuries, when the form experienced a revival.

One example of such a revival building is the 1870 Teapot Hall in Lincolnshire, England. The triangular building was built of pine rafters that ran from the ridgepole to the ground and was covered in a combination of slate and thatch. Wattle-and-daub gable ends combined with the older roof style to confuse tourists and historians alike, who often mistook the building for a medieval cottage. The building was destroyed by fire in 1945.6

On a larger scale, the Swedish architect Victor von Gegerfelt also returned to the triangular building as part of a Romantic Era Norse Revival movement. Attempting to rediscover "a pure Scandinavian building tradition," Gegerfelt developed and showcased his stave-triangle system in large exhibition buildings, a Swedish fish market, and private residences (see Figure 2).⁷



⁵ Simon Webb, March 4, 2006, wikicommons, commons.wikimedia.org/wiki/File:Cruck_framing.jpg.

⁶ Randl, 20.

⁷ Randl, 21–22.



Figure 2. The 1874, von Gegerfelt designed Feskekôrka, or Fish Church, a fish market in Gothenburg, Sweden.⁸

(3) American forms

Prior to the emergence of the A-frame vacation home, triangular buildings in the United States, unlike similar forms in Europe and Asia, have almost exclusively been used only for storage or temporary shelter. This apparently holds true for even the earliest American forms, as writers have noted that American Indian triangular structures, such as "log tents" and double lean-to's, tended to not be used as housing except on a temporary basis. Moreover, American Indian buildings generally fell into one of three forms: domed or round, conical, or rectilinear. Triangular, A-frame type forms were generally absent.⁹

For white settlers, triangular, A-frame type buildings were primarily used on farms as ice houses, pump houses, shelters for people and crops in the fields, and chicken coops.¹⁰ One of the first prominent examples of an A-frame residence in the U.S. was designed by Austrian architect Rudolph Schindler. Schindler immigrated to the United States in 1914 and was hired by Frank Lloyd Wright in 1918. He worked on two of Wright's major commissions, the nonextant Imperial Hotel (1918) in Tokyo, Japan, and the extant Hollyhock House (1919-1922) in Los Angeles, California. At the time, Southern California was



⁸ ArildV, *Feskekôrka, Gothenburg, Sweden, Victor von Gegerfelt.*, September 24, 2011, wikicommons, https://commons.wikimedia.org/wiki/File:Feskek%C3%B4rka_september_2011.jpg.

⁹ Virginia Savage McAlester, *A Field Guide to American Houses* (New York: Alfred A. Knopf, 2013), 106–16; Randl, *A-frame*, 24; Peter Nabokov and Robert Easton, *Native American Architecture* (New York: Oxford University Press, 1989).

¹⁰ Randl, 24.

experiencing a boom in population and economic fortunes, providing work opportunities for architects and builders. Schindler settled in Los Angeles in 1922, where he practiced until his death in 1953.¹¹

Much of Schindler's design work in Los Angeles was characteristic of modern design in Southern California: "glass walls, right angles, flat roofs, and open plans." Starting in the 1920s, however, Schindler began to incorporate steeply pitched roof lines into his designs. He designed three triangular houses, albeit with flat-roofed components, only one of which was built: the Gisela Bennati House.

The extant Bennati House was built in 1934 in a resort community outside of Los Angeles, near Lake Arrowhead. Constructed of a "series of triangular trusses, tied laterally by collar beams and resting on a masonry base," the Bennati House was a forerunner of A-frame vacation homes that would dominate the market 25 to 30 years later. The sides of the equilateral triangle, formed by the trusses running from ridgeline to ground, functioned as both roof and wall. This roof-wall combination, and the large gable window that blurs distinctions between inside and out, are both recognized as characteristic features of A-frame homes of the 1950s and 1960s. The interior of the building was also laid out in a way that would become characteristic of later vacation homes. Schindler's design had a large living room space at the front of the building, next to the gable window. This living space was open from floor to ceiling, where Schindler left the rafters and plywood cladding exposed. The rear of the building contained lofted bedrooms with kitchen and bathroom underneath, an interior that would also become characteristic of later examples. As architectural historian Chad Randl wrote in his definitive history of *A-frame*: "The Bennati house was essentially a postwar A-frame vacation home, built twenty years ahead of its time." 13

B. Vacation homes

By the 1960s the A-frame vacation home had become a cultural icon. As an icon, the form of the A-frame encapsulated a number of important economic, architectural, and cultural changes that have come to define the U.S. postwar era. At the heart of this shift was the driving force of postwar prosperity, which allowed more and more Americans to take part in the newly developing leisure culture. The A-frame became a symbol of that new culture and symbolized the postwar American promise of "the good life."

(1) Prewar vacation homes

Before World War II vacation homes were largely only available to the wealthy. During the second half of the nineteenth century, "taking a vacation" became a regular occurrence for a growing number of middle class Americans. Most of these vacationers, however, were visiting hotels, resorts, and spas rather than spending time at private vacation homes; such luxury was still out of reach for all but the very wealthy.¹⁴

¹⁴ Cindy S. Aron, *Working at Play: A History of Vacations in the United States* (New York: Oxford University Press, 1999), 46.



¹¹ "Rudolph M. Schindler," MAK Center for Art and Architecture, Los Angeles, 2017, http://makcenter.org/rm-schindler-bio/.

¹² Randl, 24.

¹³ Randl, 27.

For those who could afford second homes, many chose to construct buildings that evoked the "fantasy of escape from the everyday world." The Adirondack Great Camps of the late nineteenth century, for example, built log cabins in a rustic style that gave visitors a sense of "roughing it." For those of slightly lesser means, more modest second homes were often built in the same recognizable styles as permanent homes: English cottages, Cape Cods, and bungalows. ¹⁷

(2) Postwar vacation homes

The immediate postwar decades in the U.S. were characterized by economic prosperity and growth that shaped all manner of social, cultural, and political landscapes. This economic prosperity, and many of the changes it brought with it, made the A-frame vacation home "the right form at the right time." In other words, the A-frame vacation home was the perfect fit for the massive changes postwar prosperity brought to the U.S.

(a) Democratization of vacations

Most Americans in the U.S. found themselves in a far better economic situation after World War II. Mobilization efforts during the war, and the need to help Europe rebuild at the close of the conflict, meant the woes of the Great Depression and wartime austerity were being replaced by a wealthier, more financially stable population drawn to a postwar culture of conspicuous consumption.

Most Americans saw their personal earnings increase markedly. The GI Bill helped many returning servicemen find employment after being discharged from the military, and many of those jobs were in corporate environments. As a result, in the 10-year period between 1955 and 1965, the average American income rose 50 percent, and disposable income grew by nearly 60 percent. The increasing wealth for average Americans meant the middle class grew in size and in power. The middle class was now a critical social, cultural, and political force.¹⁸

At the same time personal wealth was increasing, so too was the amount of time the average worker and his or her family had for leisure pursuits. By the 1950s the 40-hour work week was a standard for most employees. Whereas Saturday had formerly been a half-day on the last day of the work week, the five-day work week was now standard. Paid vacations also became an important part of employee compensation. By 1969 the average paid vacation for U.S. workers was two weeks, and workers had five times as many paid holidays as in 1940.¹⁹ The increase in



¹⁵ Randl. 40.

¹⁶ Harvey H. Kaiser, *Great Camps of the Adirondacks* (Boston: David R. Godine, 1982), 2.

¹⁷ Randl, 40.

¹⁸ Randl. 32.

¹⁹ Randl, 32–33.

worker wealth and free time is a large part of why historian Susan Sessions Rugh dubs the 1950s and 1960s "the golden age of American family vacations." ²⁰

This golden age was part of the larger culture of consumerism during the period. In the five years after World War II, overall consumer spending rose 60 percent. Most of that money was spent on the home and household items. During that same period, the amount of money spent on household furnishings rose by an astounding 240 percent.²¹ Part of this increased spending stems from the fact that the 1950s and 1960s was the era of "second everything," when postwar prosperity made second televisions, second bathrooms, and second cars expected accoutrements of middle-class American life."²²

The combination of increased wealth and increased leisure time within a culture of consumption meant that second homes, like A-frame vacation homes, came to be seen as markers of achieving the American good life. As Randl notes, "The second home became a rightful inheritance" of American workers during this period.²³

(b) Federal infrastructure and recreational initiatives

At the same time American families had greater wealth, time, and cultural imperatives to consume, they also had greater access to recreational areas where that money and time could be spent thanks to the work of the federal government. The newly constructed Interstate Highway System brought vacationers to more remote recreational areas faster than earlier highway systems. The system was first authorized in 1956, and by 1970 had built 41,000 miles of roadway.²⁴

Likewise, vacationers had greater access to bodies of water in the U.S. West during this period thanks to the work of the Federal Bureau of Reclamation. The Bureau of Reclamation has been responsible for designing and building large water engineering structures like dams, hydroelectric power stations, flood mitigation structures, and systems of irrigation in the arid West since 1902. Dams, in particular, created reservoirs that, when opened to the public, created water-based recreational spaces that served as a draw to visitors and vacationers.²⁵

While access to recreational areas for vacationers were by-products of the Interstate Highway System and the work of the Bureau of Reclamation, the federal government also took a more

²⁵ William D. Rowley, *Reclamation: Managing Water in the West* (Denver: Bureau of Reclamation, 2006), xxiii; Randl, *A-frame*, 34.



²⁰ Susan Sessions Rugh, *Are We There Yet?: The Golden Age of American Family Vacations* (Lawrence: University Press of Kansas, 2008).

²¹ Elain Tyler May, Homeward Bound: American Families in the Cold War (New York: Basic Books, 2008), 157.

²² Randl, 10.

²³ Randl, 32.

²⁴ John A. Jakle and Keith A. Sculle, *Motoring: The Highway Experience in America* (University of Georgia Press, 2008), 153.

direct role in encouraging middle-class vacationers to make use of public lands. The Bureau of Outdoor Recreation, formed in 1962, worked to coordinate activities at the federal, state, and local level with the aim of encouraging Americans to make use of public recreational areas. ²⁶ Likewise, the Department of the Interior increased the sale of U.S. Forest Service land for vacation homesteading during this period from 103 lots in 1951 to nearly 10,000 in 1960. ²⁷ Programs like these encouraged Americans to not only make use of public recreational areas, but build on them as well.

(c) Cultural meanings of the postwar A-frame

The A-frame was more than a simple effect of postwar economics and federal investment in infrastructure and public lands, it was also an icon of postwar culture. In its reception, construction, and proliferation the A-frame embodied American culture of the 1950s and 1960s, especially that culture's relationship to ideas of nature and the environment.

Architecturally, the A-frame was a reaction to earlier, stricter forms of modernist design. Modern style vacation homes had been built during the 1920s and 1930s, most notably in the form of International style beach houses on the east and west coasts. These buildings had flat roofs, ribbon windows, and open interiors with white walls. According to Randl, these vacation homes were "derived from a European industrial and socialist design that had nothing to do with leisure."²⁸

By contrast, the A-frame vacation home was a form of "accessible modernism." This new accessible modernism held a very different relationship to nature and the environment. The A-frame was part of a variety of American modern vacation homes that broke with a strict modernist aesthetic, emphasizing instead, "playful informality, dynamic structural concoctions, unconventional roof shapes, open plans, and unusual glazing configurations." The open plans and glazed walls characteristic of the A-frame form were particularly important in the way they merged indoor and outdoor space. These features "suggested a more engaged and salutary relationship with the outdoors." In contrast to earlier log cabin forms that served as a "bulwark against the wilderness," A-frame vacation homes put nature "on display, more of an accoutrement than a threat" (see Figure 3).31



²⁶ Lary M. Dilsaver, *America's National Park System: The Critical Documents* (Rowman & Littlefield, 2016), 198–209.

²⁷ Randl. 36, 198.

²⁸ Randl. 40.

²⁹ "A-frame," Washington Department of Archaeology and Historic Preservation, n.d.; Randl, *A-frame*, 41.

³⁰ Randl. 41.

³¹ Randl, 41.



Figure 3. Cover to a 1969 vacation home plan book, illustrating the importance of leisure activities to postwar American culture and the central importance of the A-frame vacation home to those activities.³²

This new relationship to nature, found in the characteristic form of the A-frame vacation home, can also be understood as an element of America's Cold War culture. On the one hand, the U.S. had triumphed over the adversities of the Great Depression and World War II and there was, in general, "a sense that postwar America had earned the right to relaxation." On the other hand, the shadow of the Cold War during the 1950s and 1960s meant that there was also a fear that too much relaxation would make the country soft and vulnerable to attack. The leisure culture that developed around vacation homes like the A-frame counteracted that fear by billing itself as wholesome, family oriented activity. A second family home also meant furnishing it with a second set of furniture, dishes, and linens, so the new leisure culture was also comfortably consumer-oriented. Finally, a second vacation home meant being outdoors and physically active, either in outdoor activities like skiing or hiking or in building the vacation home itself. In this way, the leisure culture that was focused around the vacation home was family and consumer-oriented, while also being individualistic and physically demanding. As such, "vacation homes, including A-frames, were clearly seen as a bulwark against a creeping Communism and a soft citizenry."



³² Year 'Round Vacation Home Plans: 50 Exciting Designs to Build (Master Plan Publications, 1969).

³³ Randl. 34.

³⁴ Randl, 37-38.

(3) Architect-designed A-frames

The first part of the 1950s saw a select group of architects, most of them centered around San Francisco, introduce the A-frame form to architectural audiences and the American public at large. San Francisco was an important location of early A-frame designs for a number of reasons. First, the area surrounding the city had a vibrant architectural scene, which had developed its own regional style, alternately labeled the Bay Area style, Bay Region Modern, or the Bay Area tradition. This style was a "loosely defined architectural attitude, marked by deference to site, open plans, a reliance on local natural materials, and a clear expression of structure." Characteristics of the A-frame form like exposed wood and large windows fit within this style, but so too did the attention paid to the building site and the use of local and natural materials. Moreover, the informal lifestyle of Northern California easily translated into the design of vacation homes. ³⁶

In addition to the architectural scene in San Francisco, Northern California was quickly becoming a postwar vacation destination. Skiing and other outdoor activities around Squaw Valley and Lake Tahoe were becoming increasingly popular as more of the region was accessible to visitors thanks to the development of the area's ski resorts. The first ski resort, Sugar Bowl, was opened in 1939, and Squaw Valley followed in 1950. By 1966 the Donner-Tahoe region boasted five major ski resorts, making it one of the largest ski regions in the U.S.³⁷

This combination of new outdoor recreational opportunities and a vibrant architectural scene made Northern California the opportune place for the birth of the A-frame vacation home as a form. As architectural journals, design magazines, and newspapers began to publicize the early Northern California designs, however, the A-frame form quickly made its way to other regions of the country. These early architect-designed A-frame vacation homes set the precedent for the way later, more affordable and accessible forms were designed, built, marketed, and sold.

Suburban residential subdivisions built in cities and towns during the late 1950s and 1960s also experimented with A-frame models, particularly in neighborhoods that featured Contemporary styles. Joseph Eichler, a prolific subdivision developer in California, strived to provide simple, modern forms for houses to be fabricated through mass production, which became known as the "California Contemporary" style.³⁸ Architect Claude Oakland provided Eichler with A-frame designs, and architect A. Quincy Jones also created modified A-frame designs for the Hallberg Homes in Portland, Oregon. While these examples featured prominent A-frame roofs, the legs of the A-frame roof often did not extend to the ground. However, architect Frenchie Gratts of the Denver firm Gratts and Warner, who designed a modified A-frame form as one of the models in the Lynwood subdivision in southeast Denver, did extend

³⁸ The Center of Preservation Research at the University of Colorado Denver, *Krisana Park Pattern Book: Ideas for a Midcentury Modern Neighborhood, Denver, Colorado* (Colorado University Center of Preservation Research, 2017), 10.



³⁵ Randl, 48.

³⁶ Randl, 48.

³⁷ Wolfgang Lert and Morten Lund, "Bill Klein in Donner Pass," Skiing Heritage 11, no. 2 (June 1999): 23.

the A-frame legs to the ground. Other common elements of the Lynwood A-frame included exposed beams, a prominent exterior chimney, clerestory windows at the gable peak, and the garage and main entrance attached to the A-frame by a breezeway.³⁹ This example of a modified A-frame included wings on one or both sides to maximize the amount of living space for single-family permanent residences.

While the early architect-designed A-frames called out below were all designed for use as vacation homes, many later architect-designed A-frames were larger single-family homes intended for use as a primary residence.

(a) The Leisure House Design, John Campbell, San Francisco, 1951

John Campbell's Leisure House was the most publicized of these early A-frame designs. Designed in 1950, the Leisure House was first featured in *Interiors* magazine in 1951 as part of its annual spread, "Interiors to Come." A full-sized model was presented at the 1951 San Francisco Arts Festival. The design was minimalist, featuring inclined planes that enclosed an unpartitioned space beneath. The model lacked doors or windows, and one wall featured a 4-foot gap to make room for a "space mural." Despite its conceptual, minimalist construction, the Leisure Home model was a hit and Campbell started selling plans for the house for 25 dollars. Soon after, Campbell partnered with a local construction company to create a Leisure House kit that included precut timbers, nails, and even a hammer. Ultimately, Campbell's Leisure House was innovative and highly influential not because of its design, but because of its marketing, which would serve as a template for later A-frame kits and prefabricated homes.⁴⁰

(b) The Flender A-frame, Henrik Bull, Stowe, Vermont, 1953

While architects continued to design A-frame vacation homes in Northern California, the form began to spread throughout the U.S., notably in ski resorts and second home parcels in the West and Southwest, lake resorts and vacation cabins in the Midwest, the mountains of New England, and the beaches of Long Island. In 1953 Henrik Bull designed and built what was likely the first A-frame in the Northeast. Bull and his friend John Flender were avid skiers, and Bull designed the Flender A-frame as a cabin for skiing weekends in Stowe, Vermont. Initially designed as a series of trusses set upon a pier foundation, the pair were unable to get a construction loan because banks viewed the cabin as a temporary structure. A concrete block foundation and basement were added to secure financing. In addition to helping introduce the A-frame to the Northeast, the Flender A-frame is also known for its glazing scheme, which covered the entire gable end.⁴¹

(c) The Betty Reese House (nonextant), Andrew Geller, Sagaponack, Long Island, 1955
In 1955 Andrew Geller designed a beach home in the Hamptons for New York business woman
Betty Reese. In addition to bringing the A-frame out of the mountains and onto the beach,



³⁹ Kathleen Corbett, PhD, Corbett Architectural Historians with Dianna Litvak, Mead & Hunt, Inc., "Survey Report Discover Denver Phase #2, Area 1: Virginia Village," 2017, 14, 32–33.

⁴⁰ Randl. 51–53.

⁴¹ Randl, 61, 64, 67.

Geller's most significant innovation was designing a new orientation for the building. Geller moved the home's entrance from the gable end to a side wall/roof. The house was also set parallel to the shoreline, allowing it to echo and blend in with the surrounding sand dunes. Finally, Geller added a series of dormers and porches to the side walls to increase light and airflow for the beach home. In 1957 the Reese home was featured in the *New York Times*. This publicity launched Geller's career in vacation home design and sparked the growth of the A-frame as a popular beach home style.⁴²

(4) Plan books, A-frame kits, and prefabricated A-frames

John Campbell's success at marketing first the plans and then the kits for his Leisure Home design demonstrated that there was a market for prefabricated A-frames and A-frame kits. The late 1950s and 1960s saw an explosion of growth in this area as leisure culture, a growing print and publishing industry, and new construction technologies combined to publicize A-frames and make their construction as cheap and easy as possible.

(a) Plan books

Some of the earliest plan books were published by building industry associations. New, lightweight, inexpensive building materials like plywood, Masonite, and Formica were publicized through plan books that instructed consumers how to use those products to construct their new vacation home. The Douglas Fir Plywood Company was the first to push its products through A-frame plan books in 1958. The Western Wood Products Association soon followed suit in 1960, as did a handful of other building industry associations. At the same time, individual building material companies added their own plan books to the mix. Potlatch Forests was one of the first companies, in 1961, to offer A-frame plans in their *Free-Time Home* plan book. Newspapers and magazines also distributed plans and advertised the plan books of companies and trade associations during this period, helping to spread the A-frame form across the U.S.⁴³

(b) Kits

A-frame kits became popular in the early 1960s. Large lumber manufacturers sold kits nationwide while smaller lumber dealers, located near popular recreation areas, assembled and sold kits regionally to capitalize on lower shipping costs (see Figure 4). With some variation from dealer to dealer, most kits included lumber that was already cut to size and with bolt holes predrilled. Doors, hardware, and even nails and bolts were also often included. Some dealers even included options to add on plumbing and heating kits, septic tanks, and fireplaces to the basic kit. One of the largest manufacturers of A-frame kits was Lindal Cedar Homes, whose innovative use of tongue-and-groove laminated planks in place of trusses helped the company sell 7,000 A-frame kits between 1965 and 1982.44



⁴² Randl, 70–71.

⁴³ Randl, 83, 87–99.

⁴⁴ Randl, 102-5.



Figure 4. 1965 advertisement from a Seattle and Olympia, Washington, lumber dealers for A-frame plan books featuring the new building material, Homasote.⁴⁵

(c) Prefabricated A-frames

Prefabricated A-frames took the convenience of the pre-cut kit to the next level. Most prefabricated A-frames were constructed by linking together a series of structural sandwich panels. These panels were made up of a rectangular frame of 2-by-4-inch boards covered with plywood sheathing. After the panels were linked together, prefabricated gable ends and interior partitions were added to complete the building. In some cases, use of prefabricated panels decreased the cost of on-site labor by as much as 80 percent. This cost savings was particularly

⁴⁵ "Build Your 'A-frame' Vacation Cottage with Homasote," Seattle Times, September 12, 1965.



attractive to real estate developers looking to build inexpensive vacation villages and resorts. Companies specializing in prefabricated A-frames shipped these buildings across the U.S. Some of the largest of these companies were concentrated in the Northeast and Northwest, but prefabricated A-frames were also shipped to resort areas in the Midwest like Ohio, Pennsylvania, and upstate New York, and resort communities in the Southeast like North Carolina's Outer Banks and Virginia's Holiday Village.⁴⁶

(5) National typologies

One of the major draws of the A-frame vacation home, in addition to its affordability and ease of construction, was its customizable nature. Whether a design was customized for a particular site or for the needs of a specific owner, the A-frame vacation home as a form exhibits a wide variety of iterations. Generally speaking, however, A-frame vacation homes exhibit two main typologies: the mountain A-frame and the beach A-frame. Because the A-frame vacation home was intended to meet the needs of a specific site's topography and climate, the primary differences between mountain A-frames and beach A-frames are driven by the geographic differences.

(a) Mountain A-frame

Mountain A-frames derive their characteristics from their connections to U.S. ski culture and history. The number of ski resorts in the U.S. expanded rapidly in the decades after World War II, growing by more than 15 percent between 1961 and 1966.⁴⁷ The growth in popularity of skiing coincided with the growth in popularity of the A-frame. A-frame buildings even figured prominently in coverage of the 1960 Winter Olympics in Squaw Valley.⁴⁸ In all of its iterations, then, the A-frame is most closely associated with skiing and mountain terrain regardless of its location, making the mountain A-frame the dominant type.

The mountain A-frame is characterized by A-shaped trusses, often set at 60 degrees to the base of the building to form an equilateral triangle (see Figure 5). Steeper and more shallow roof pitches are also common, but steeper roofs prevail where heavy snows are prevalent to help alleviate heavy snow loads. The inclined plane of roof/wall runs from ridgeline to foundation. Foundations can be simple piers or more substantial concrete foundations. Dormers, windows, or skylights are often absent from side elevations, to help the building shed snow as well as retain heat and prevent water penetration around skylights. At least one gable end (usually the front facade) features a large glazing pattern, sometimes covering the entire gable. Both gables are generally set back substantially under eaves formed by the roof/walls. A porch of varying size is usually present on the front facade, sometimes elevated to the main living level if a substantial foundation or basement is present.



⁴⁶ Randl, 109–10.

⁴⁷ Randl. 113.

⁴⁸ Randl, 114.



Figure 5. This Boulder County A-frame (71 Beaver Creek) represents the characteristics of the mountain type of A-frame vacation home.

Mountain A-frames have characteristically open interiors. The space adjacent to the front gable and large window is generally open to the rafters. A loft space of one or more bedrooms usually occupies the back portion of the building with kitchen, bath, and service spaces beneath. This open layout led to one of the major drawbacks of the A-frame as a form. The open space was difficult to heat adequately, as heat rose to the open ceiling, making loft areas hot and stuffy and leaving the main living area cold. This problem was exacerbated by the prevalence of characteristic open rafters, which left little room for insulation, and large glazing on the gable end, which leaked heat. Additionally, the mountain type of A-frame generally drew most of its light from the front gable window, making the interior of the A-frame dark.

(b) Beach A-frame

As discussed above, Andrew Geller introduced the A-frame to the beach with the Betty Reese House (nonextant) in 1955. Geller's main innovation was to reorient the basic mountain A-frame so the entrance and front facade of the building were moved from the gable end to the side wall. This allowed Geller to "turn" the A-frame parallel to shore, mimicking the shape of sand dunes. This reorientation of the A-frame, however, did not catch on, and the beach type of A-frame usually follows the same orientation as the mountain type.

Indeed, the beach type mirrors the mountain type of A-frame closely, with only small variations often based on location. For example, in areas prone to flooding or high water, beach type A-frames forgo concrete piers and foundations for stilts, often made of either wood or steel. In some instances, the area under the raised building is enclosed as a garage or storage space. Because beach type A-frames generally do not need to worry about snow loads and are often more concerned with sunlight and air circulation, some beach type A-frames exhibit a wider use



of dormers, and skylights or windows on side walls, although mountain types also occasionally include these elements as well. Exteriors appear to also be painted more regularly for beach type A-frames, possibly to dissociate the building from the often-unpainted mountain type. In general, however, the mountain type of A-frame is the dominant type.

C. Non-residential applications

(1) Backcountry/park architecture

(a) Backcountry shelters

As more remote wilderness areas were made accessible and used by more and more visitors in the postwar era for hiking, skiing, and hunting, a number of outdoor associations, like the Sierra Club, began to build backcountry A-frame buildings to serve as temporary shelter for wilderness visitors. These buildings exhibited the characteristics of the mountain type A-frame but tended to be built from materials at hand in the backcountry instead of from kits or prefabricated material that would have been impractical to transport to a wilderness site.⁴⁹

(b) Park architecture

After seeing the success of the backcountry A-frame, federal and state agencies began to adopt the A-frame for various park structures starting in the mid-1960s. Many of these buildings served as backcountry shelters, but other larger, more refined A-frames were used as visitor centers and park offices (see Figure 6). At the same time, the U.S. Department of Agriculture (USDA) published plans for A-frame cabins (see Figure 7). The USDA distributed these plans through state extension services.⁵⁰ All of these buildings exhibited the dominant mountain type A-frame.



Figure 6. c.1960 Rocky Arbor State Park office near Wisconsin Dells, Wisconsin.



⁴⁹ Randl, 155–116.

⁵⁰ Randl, 116–17.

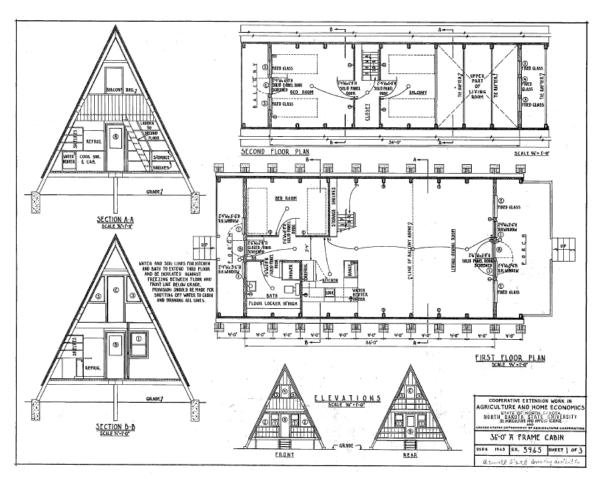


Figure 7. U.S. Department of Agriculture (USDA) A-frame cabin plans distributed through the North Dakota Extension Service, 1963.⁵¹

(2) Commercial buildings

(a) Ski resort buildings

Lodges

From their very beginning, postwar A-frames were connected to skiing and ski resort areas. This connection was reinforced in 1960, during the Winter Olympics held in the ski resort area of Squaw Valley. The Nevada Visitor's Center and the California Visitor's Center were two, tri-gabled A-frames that sat at the base of the slopes and were featured prominently in media coverage of the event.⁵² This connection between skiing and A-frames made the form a popular choice for ski lodges across the country (see Figure 8). In addition to the general association, the steep roof pitch helped to shed heavy snow



⁵¹ Cooperative Extension State of North Dakota, "36'-0" 'A' Frame Cabin," 1963, Building Plans, North Dakota State University Extension, www.ag.ndsu.edu/extension-aben/buildingplans/housing.

⁵² Randl, 113–14.

loads and large glazing patterns in the gable ends allowed for commanding vistas of ski areas from inside the lodge. These are the same characteristics that made the A-frame a popular form for backcountry shelters and private residences.



Figure 8. 1962 lodge at Cascade Mountain Ski Resort in Portage, Wisconsin. Note the multiple gables.

Outbuildings

The A-frame was also a popular style for various ski resort outbuildings. Machinery sheds, lift operator shacks, and ski patrol shacks are all examples of ski resort outbuildings that utilized the A-frame form (see Figure 9).⁵³ These buildings would have been easy to build and would have been useful in their ability to shed snow easily.



⁵³ Randl, 113.



Figure 9. c.1962 Snow Patrol shack at Cascade Mountain Ski Resort in Portage, Wisconsin.

(b) Resort hotels and motels

Prefabricated A-frames and A-frame kits were particularly important for the development of resorts made up of A-frame cabins. Many of these resorts were in ski areas in the West and New England. The proliferation of A-frame kits and prefabricated cabins, however, meant that such villages were found throughout the country. In many cases, such resorts tried to make their A-frame buildings appear more "alpine" or Bavarian by adding gingerbread edges, carved spindles, and diamond-paned casement windows (for examples of such details, see Figures 31 and 84).⁵⁴

A-frame motels were particularly popular in the late 1950s and into the 1960s. Again, these buildings tended to be clustered around ski areas but could also be readily found throughout the country (see Figure 10). A-frame motels were often built in one of two different configurations. The first configuration was the pre-World War II cabin court model, where individual A-frames would be clustered around a central courtyard. The second configuration was the motor lodge, where the A-frame units were connected in a single unit. Although such motels tended to be individual ventures, the major hotel chain Howard Johnson used A-frame buildings in its motel franchise starting in 1958.⁵⁵



⁵⁴ Randl, 114.

⁵⁵ Randl, 130.



Figure 10. c.1960 Sky Palm Motel in Orange, California. Photo Courtesy of Orange County Archives.

(c) Restaurants

While resorts and motels often sought to capitalize on the connections between the A-frame form and ideas of mountain adventure, leisure, and attaining the good life, restaurants and other business saw the A-frame more useful as a promotional tool. The bold roof line of the A-frame was instantly recognizable, especially from the freeway or a nearby highway. The flat plane of the roof/wall provided space for advertising or served as its own billboard.

Several large chain restaurants latched onto the A-frame for just this reason. In the 1960s the hamburger chain Whataburger and the hotdog chain Der Wienerschnitzel both used A-frames to help advertise their restaurants (see Figure 11). According to the founder of Der Wienerschnitzel, John Galardi, the A-frame building "doubled the exposure of the building. It looked like a billboard lowered onto the street." By the 1970s municipalities were beginning to design guidelines and zoning restrictions to limit such buildings, which led to the A-frame restaurant decreasing in popularity. 57



⁵⁶ Randl, 134.

⁵⁷ Randl, 130–34.



Figure 11. The 1974 Der Wienerschnitzel hotdog restaurant in Orange County, California, featuring an A-frame roof that doubles as an advertisement.⁵⁸

(3) Religious buildings

As postwar populations boomed and American suburbs expanded, religious communities needed new houses of worship. For Christian denominations, A-frame churches offered quick and inexpensive buildings that provided a modern aesthetic for new suburban populations while connecting them to older religious traditions. As Gretchen Buggeln states in *The Suburban Church: Modernism and Community in Postwar America*, "The initial successful match between the A-frame church and the aspirations of congregations indicates its special correspondence with new postwar religious culture. The A-frame balanced the tensions suburbanites navigated...It met the 'looks like a church' criterion while signaling a contemporary spirit." Buggeln also notes that the form was occasionally used by synagogues. 60

Congregations began building A-frame religious buildings in the early 1950s, at the same time A-frame vacation homes were quickly gaining popularity. They were built from a variety of materials including wood, steel, concrete, and even prefabricated units. They ranged from small, simple houses of worship to grand, architect-designed buildings. While the steep pitch of the roof mimicked traditional church spires, steeples were often integrated into the building itself or set off as an independent structure. In many cases the A-frame was set on short knee walls with ribbon windows in an effort to provide more

⁶⁰ Gretchen Buggeln, *The Suburban Church: Modernism and Community in Postwar America* (Minneapolis: University of Minnesota Press, 2015), 85.



⁵⁸ Werner Weiss, "Der Wienerschnitzel, 105 E. El Camino Real at 1st St., Tustin, Calif.," 1974, Werner Weiss Collection, Acc#2013.6, Orange County Archives.

⁵⁹ Gretchen Buggeln, *The Suburban Church: Modernism and Community in Postwar America* (Minneapolis: University of Minnesota Press, 2015), 86.

usable interior space (see Figure 12). By the mid-1960s the A-frame form began to fall out of favor with congregations. It was largely a victim of its own success and popularity, and was seen as "boring," "unimaginative," and "pedestrian."⁶¹ Starting in the mid-1960s, congregations began to turn to other architectural forms for houses of worship.



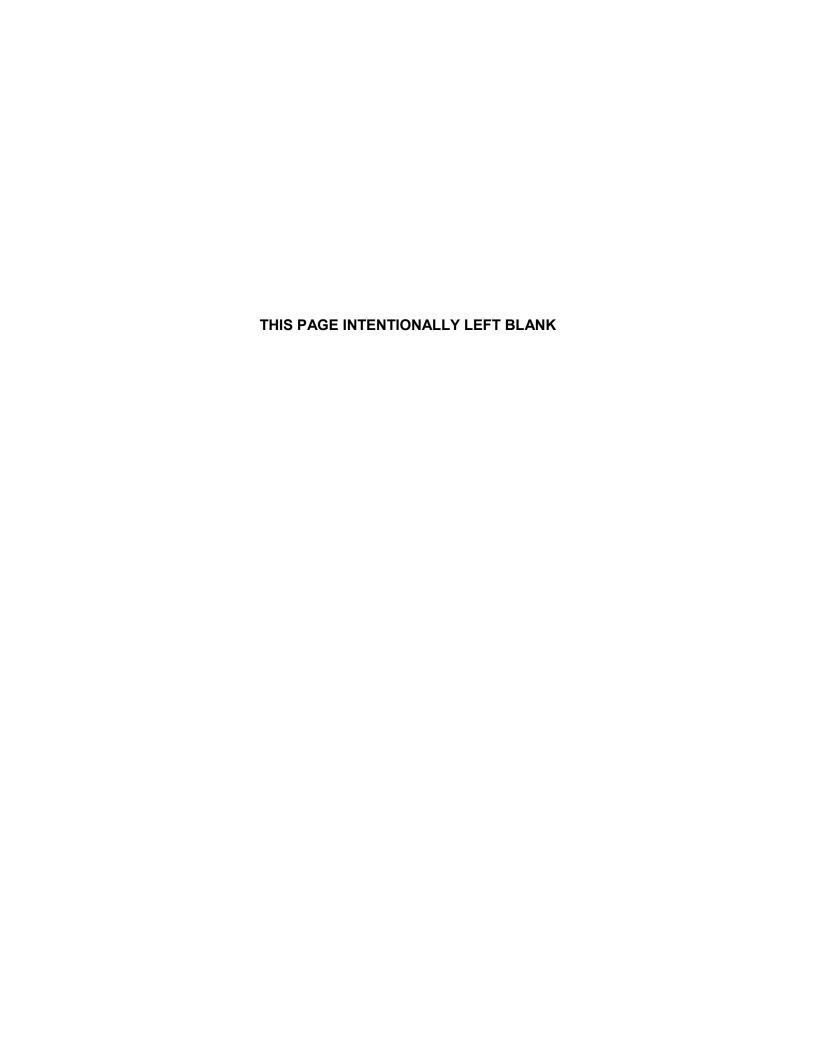
Figure 12. c.1970 A-frame church in Cozad, Nebraska. Note the use of side walls to maximize usable interior space.

D. National context conclusion

Triangular, A-frame-like buildings can be traced back to Neolithic societies and historic examples can found in a variety of cultures throughout the world. Historically, triangular shaped buildings have been popular in large part because they are easy to construct, do not require special materials, and make for strong buildings. These factors helped make the A-frame vacation home popular in the postwar U.S., but so too did the changing social, economic, and architectural trends after World War II. This combination of factors made the A-frame both a popular building form and a cultural icon. Culturally, A-frames represented the "good life" of the postwar era, which a much larger portion of the U.S. population had the time and money to enjoy. The A-frame gained its greatest popularity in the West, where newly opened recreational areas helped to culturally tie the A-frame to mountain landscapes and ski resorts. Economically, A-frames became attractive vacation homes for Americans because they tended to be inexpensive and easy to build. Lumber producers capitalized on this new market by selling kits to eager postwar consumers. In this way, A-frames were an accessible form of modernism—affordable, architecturally stylish, but otherwise unpretentious. This combination of factors meant that the A-frame became a fashionable form for not only vacation homes, but buildings ranging from back-country shacks to large, architect-designed homes and from hotdog stands to churches and synagogues.



⁶¹ Buggeln, 86, 121-123.



5. Tourism in Boulder County

Much of Boulder County's early history revolves around mining. The county was crisscrossed with treacherous early wagon roads utilized by miners to bring supplies to the camps and transport the minerals and ores from the mountains. This task was made easier with the introduction of railroads in the county, including the Greeley Salt Lake & Pacific, the Union Pacific Denver & Gulf, the Colorado & Northwestern (known as the Switzerland Trail), and the Denver Boulder & Western. 62 When the Colorado & Northwestern line was not as profitable in transporting ore and gold bricks, the line shifted focus to attracting tourist passengers to the Rocky Mountain scenery. The line was named the Switzerland Trail and transported tourists on daytrips and popular wildflower excursions along Fourmile Canyon. The advent of the automobile, among other factors, provided too much competition for tourist railroads, and eventually the Switzerland Trail line closed. 63

As mining in the county waned, many of the former mining communities found a future in tourism. However, many communities, like Gold Hill, attracted tourism while mining was still occurring. Gold Hill boasted the popular Miners Hotel (also known as the Wentworth House and later the Gold Hill Inn), which provided accommodations for tourists seeking the beautiful scenery, amenable climate, and the health benefits of the high altitude communities. People had long recognized the benefits of the dry climate and low humidity to aiding in tuberculosis and other respiratory problems. Multiple sanitariums opened in Colorado and Boulder County, where ailing individuals sought treatment. In addition to respiratory benefits, individuals also sought what were believed to be the curative elements found in hot springs. In Boulder County, Eldorado Springs, also known as Moffat Lakes Springs in its early years, was developed into a resort in the early 1900s. The Moffat Lakes Resort Company, which obtained the land where the springs are located in 1904, envisioned a "European type spa" where visitors from Denver and Boulder could visit the springs and associated roller skating pavilions, picnic areas, hotel, and of course the pools, by way of a spur line from the Colorado and Southern Railway. Figure 1.

Non-profit and charitable organizations also recognized the benefits that Boulder and the surrounding county held. The popular Chautauqua, located off Baseline Road in Boulder, opened in 1898 with an auditorium, movie house, and dining hall.⁶⁷ The Altura Club, which sought to provide recreation and relaxation to single working women from cities, opened the Blue Bird Cottage in Boulder in 1911. It expanded its offerings in 1921, when the club converted the former Gold Hill Inn to the Blue Bird Lodge.⁶⁸

⁶⁸ Anstey and Thomas, "Fourmile Canyon Historical and Architectural Survey, 2012-2013."



⁶² Mary Therese Anstey and Adam Thomas, "Fourmile Canyon Historical and Architectural Survey, 2012-2013" (prepared for Boulder County Parks and Open Space, n.d.), 24.

⁶³ Anstey and Thomas, 24.

⁶⁴ Anstey and Thomas, 24-25.

⁶⁵ Betty M. Chronic, "Eldorado Springs Resort Historical Context 1904-2004," July 7, 2005.

⁶⁶ Chronic, 16-17.

⁶⁷ Jennifer Bryant and Carrie Schomig, "Historic Context and Survey of Post World War II Residential Architecture Boulder, Colorado" (prepared for the City of Boulder, Colorado, April 2010), 89.

The City of Boulder identified the importance of its natural environment and the potential opportunities it held, hiring famed landscape architect Frederick Law Olmsted to develop a planning guide in 1910 for the city. This guide included a network of mountain parks west of the city. The expansive Boulder park network, which included mountain parks beyond the city limits, attracted individuals to recreate and maintain a healthy lifestyle.⁶⁹

The federal government knew the special qualities the Rocky Mountains held, and established Rocky Mountain National Park within Larimer, Grand, and Boulder Counties in 1915. While the park never had direct rail access, train service had stops in communities like Ward and Lyons. From there tourists continued on via alternate means, including wagons and horseback, to Estes Park and the National Park beyond. Tourists later accessed the parks via automobile. Small communities of summer cabins existed along the way, including Ward, Raymond, Peaceful Valley, Riverside, and Allenspark, where vacationers could either stay as their home base or pass through along their journey. Peaceful Valley, which served as a stage stop on the route from Ward to Estes Park, boasted an early resort, while Raymond had a hotel.⁷⁰

In addition to the former mining communities, charitable recreation facilities, and the park system serving as tourism draws, small cabin communities had long been established along the Coal Creek Canyon area including Wondervu, Pinecliffe, Lincoln Hills, and Miramonte. Early tourists sought not only rest and relaxation in the mountains, but also relief from many respiratory illnesses provided by the high altitude. Many of these communities were initially accessed by rail, including the Moffat Road, as well as wagon roads. As the automobile became more available to individuals, vacation developments in outlying areas within the county were established. These vacation homes were not only frequented by out-of-state visitors, but by residents of Denver, Boulder proper, and other Front Range communities. Families would spend weeks or entire seasons in the mountains beyond Boulder, near enough to return to the city for work as needed. However, tourism development, along with many other areas including roads, home construction, and job growth, declined during the Great Depression and the two World Wars.

Tourism numbers were not always tracked, and their exact impact on the economy was, and often still is, difficult to measure. Despite these difficulties, the value of tourism was long recognized. The Chamber of Commerce was established in Boulder in 1905, changing its name shortly thereafter to the Boulder Commercial Association. The group, which was comprised of prominent business owners, partnered to build the Boulderado Hotel.⁷¹ It was also charged with promoting "...the general prosperity of the City of Boulder, to publish and broadcast the pre-eminent advantage and value of climate and water, and general attractiveness of Boulder." Boosters promoted Boulder and the surrounding area's assets on national radio broadcasts and newspapers. The city not only served as a "...popular stopping place and

⁷² "Thousands Attracted to Boulder Each Year," Boulder Daily Camera Focus Magazine, August 30, 1964.



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⁶⁹ Bryant and Schomig, "Historic Context and Survey of Post World War II Residential Architecture Boulder, Colorado," 89-90.

⁷⁰ Charles Wendt, "Summer Resorts of Boulder County," *Boulder Daily Camera Focus Magazine*, October 18, 1964.

⁷¹ Steven Schultze, "The Rockies Are an Old Tourist Lure," *Boulder Daily Camera*, January 25, 1976.

'home base' for many summer vacationers," but local residents also took advantage of their surroundings by recreating "...in the vast mountain wonderland in [their] backyard."⁷³

Following the trying times and austerity of World War II, recreation and tourism flourished in the country, and Colorado in particular. In 1952 nearly \$254 million was brought into Colorado by the over 3.3 million out-of-state tourists choosing to visit the state. Early tourism in the state was restricted to the wealthy and social elite, who could afford tickets on the long train ride to reach Colorado and the time away to enjoy their mountain getaways. With the rise of the middle class, additional disposable income, and improvements in transportation including accessible air travel, more people were able to afford vacation time and flocked to Colorado's high country and the scenic beauty it offered. Colorado, and particularly Front Range, residents also joined the trend of experiencing the state as a visitor would, seeing new sites and recreating in the mountains west of the population centers.

Out-of-state visitors and residents alike took advantage of the alpine ski and Nordic facilities, which were unique to the mountains of Colorado. In the 1930s the Arlberg Club in Denver began promoting Alpine skiing. In 1940 Winter Park opened just west of the city, and was easily accessed by improved highways into the mountains.⁷⁵ The establishment of the Tenth Mountain Division's Camp Hale in Leadville, which served as an arctic training space akin to the terrain the soldiers would find in the Italian Alps, further piqued and encouraged interest in Alpine skiing in the state.

It was not after World War II, however, that "...boosters figured out how to package and promote the high country to a new generation of leisure seekers, and...tourism in the region began to burgeon on a scale that virtually no one, before the war, would have ever thought possible." The State of Colorado Advertising & Publicity Department sent a letter, along with 12 graphic designs, to local papers and radio stations, imploring them "to help make...1952...the biggest ever in volume of tourists," by promoting the state for out-of-state visitors as well as highlighting unknown facts about that state that local residents may not previously have known, noting that success would mean "dollars in the pockets of your people" (see Figures 13 and 14).77

⁷⁷ Lew Cobb, "Letter Requesting Tourism Promotion," n.d., Tourists, Printed Materials, 1936-1969 folder- BHS 328 B219 F01, Boulder Carnegie Library.



⁷³ "Invitation to Fun," Boulder Daily Camera Vacation Edition, July 2, 1956., 1.

⁷⁴ William Philpott, *Vacationland: Tourism and Environment in the Colorado High Country* (Seattle, Wash.: University of Washington Pres, 2013), 3.

⁷⁵ Philpott, 17.

⁷⁶ Philpott, 19.





Figures 13 and 14. Graphics for reproduction in Colorado tourism promotional materials by the Colorado State Advertising & Publicity Department in 1952.⁷⁸

Residents were advised in a 1953 article in the *Rocky Mountain News* how to interact with visitors. They were to remain courteous and helpful, and to make an effort to be less vague in their directions and assistance. State tourism promoters, including hospitality industry workers, local chambers of commerce, highway associations, and environmental groups, all created a vision of Colorado beyond that of just a picturesque vistas, but also an area of "thrills and tranquility and other mighty emotions," which could ultimately translate into big money. Boulder County sought this same approach, sending tourism issues of the *Boulder Daily Camera Newspaper* to communities, dignitaries, and advertising agencies across the country in an effort to keep Boulder fresh in their minds. These issues not only highlighted historic and scenic sites across the county and ideal driving routes, but also calmed concerns some may have over mountain driving, stating "don't let hazy and unfounded fears about high-altitude driving keep you from enjoying the splendors of cloud-capped views and lofty summits."⁸⁰

Adventure seekers from near and far began to see Colorado as their playground at a greater scale than ever before. Multiple mountain communities saw the potential to market their towns as ski destinations, and "the 1960s and early 1970s brought one new ski development after another: Crested Butte, Indianhead (later Geneva Basin), Lake Eldora, Storm Mountain (later Mount Werner, then Steamboat Ski Resort), Sunlight, Purgatory, Powderhorn, Meadow Mountain, Telluride."81 The massive ski resorts of today including Keystone, Copper Mountain, Snowmass, and Vail all opened during this period. During the 1962-1963 ski season, roughly 520,000 visitors took advantage of Colorado's new and expanding ski resorts, which benefitted from \$10 million in new facility investment that year. 82 Estimates from the Colorado Visitors Bureau from the 1962-1963 ski season calculated that "out-of-state skiers alone spent \$19 million."83 It was becoming clear that the ski industry, backed by the newly formed promotional



⁷⁸ Colorado State Advertising & Publicity Department, "Free Reproduction Authorized by Colorado State Advertising & Publicity Dept.," 1952, Tourists, Printed Materials, 1936-1939- BHS 328B219 F01, Boulder Carnegie Library.

⁷⁹ Philpott, Vacationland: Tourism and Environment in the Colorado High Country.

^{80 &}quot;Take to Mountains Automobile Club Advises Tourists," Boulder Daily Camera Vacation Edition, July 2, 1956.

⁸¹ Philpott, Vacationland: Tourism and Environment in the Colorado High Country.

⁸² Willard Haselbush, "Facilities in High Country Expanded for Skiing Fans," Denver Post, September 8, 1963.

⁸³ Haselbush.

nonprofit group, Ski Country U.S.A., had the potential to provide an economic boom and driving tourism force in the state.

Boulder County benefitted from the state's increased attention on skiing. The previously mentioned Lake Eldora ski area, just outside of Nederland, was the result of backcountry explorations by Gabor Cseh, a skier from Boulder. Cseh amassed some investors, including Bob Beattie, the Colorado University (CU) Boulder and U.S. ski team coach, who created the Lake Eldora Corp (LEC). The company sought permission from the U.S. Forest Service to build an alpine ski facility on 480 acres within Roosevelt National Forest. Improvements began on the mountain in the early 1960s. By 1963 the Lake Eldora ski area boasted a \$2 million "base lodge and two T-bars," as well as two additional lifts. Amenities were added to the lodge that year that brought an additional "4,000 square feet to dining and lounging areas, making them large enough for family groups, clubs and student groups."84 At the same time, improvements were made to widen the 3-mile road from Nederland to the resort, improving accessibility. Another T-bar was added in 1965 before LEC sold to Tell Ertl, which installed a snowmaking system in 1967.85 Tell Ertl also added another chairlift and lights to allow for night skiing. The amenities added to the resort, along with "its proximity to Denver—a 70-minute drive over all-weather roads...introduced halfday skiing to the midweek schedules of the fast growing ski population."86 Tell Ertl planned to build a hotel on the property, however, this plan never came to fruition as Boulder County, which had a "reputation for its efforts to protect scenic beauty and guide growth," denied the request. 87 The County also denied requests by subsequent owners to establish home sites at the ski resort.88 Because of the limited growth and lodging nearby, the resort has remained a family favorite for Boulder and Front Range families, looking to get in a day on the slopes while avoiding the Interstate Highway 70 ski traffic. The growth restrictions at the resort itself also meant that individuals interested in staying near the ski hill had to look to the areas beyond Lake Eldora itself, where they could construct their own mountain home, quite possibly even their own A-frame.

Tourism in Colorado and the high country continued to grow beyond the immediate postwar era. Tourism numbers spiked in 1971, when a whopping 8.41 million visitors came to Colorado. The gas shortage in 1972 and 1973, when long road trips seemed out of the question and families stayed closer to home, negatively impacted tourism in the state. The numbers, however, quickly rebounded. In 1975 a total of 3,643,189 individuals visited "Colorado's national parks, monuments, recreation areas, historic sites and state museums, from Jan. 1 to July 30," representing an increase of 14.8 percent over the prior year for that same period.⁸⁹ Perhaps in response to some of the dips in tourism revenue that Colorado experienced in the early 1970s, the Colorado Tourism Council, a non-profit, statewide organization of

⁸⁹ "Tourism in Colo. Up 15%," n.d., Tourists, Printed Materials, 1970-1979, BHS 328 B219 F02, Boulder Carnegie Library Newspaper Clippings.



⁸⁴ "Lake Eldora Resort Ski Area in Boulder County Expanding," *Denver Post*, August 18, 1963.

⁸⁵ "Eldora Mountain, Colorado, History | International Skiing History Association," accessed December 7, 2017, https://www.skiinghistory.org/history/eldora-mountain-colorado-history.

^{86 &}quot;Lake Eldora Resort Ski Area in Boulder County Expanding."

⁸⁷ Philpott, Vacationland: Tourism and Environment in the Colorado High Country, 265.

^{88 &}quot;Eldora Mountain, Colorado, History | International Skiing History Association."

tourism industry-related businesses, was created. According to the Colorado Tourism Council, tourism revenues more than doubled in the United States between 1960 and 1970.⁹⁰ National projections indicated that the "trend of increasing personal income and greater leisure," which was viewed as "a necessary form of therapeutic surcease from the tensions and pressures of modern life" was to continue through the 1970s.⁹¹ The Colorado Tourism Council wanted to make sure that Colorado received "its fair share of this increase since so many of the residents and towns are dependent upon tourism for their livelihood," and as a result began publishing a series of papers that highlighted tourism data in the state in an effort to increase the amount the state spent promoting tourism in Colorado.⁹² It was estimated that in 1976, some 50,000 jobs in Colorado were directly tied to tourism, while the roughly nine million visitors to the state generated some "...\$49,000,000 in State Tax cash flow, and \$710,200,000 in direct sales." During the 1970s Boulder specifically did not track tourism numbers, however, it was estimated at the time that at least a third of Boulder's tourist trade came from conferences and institutes offered by CU.⁹⁴

Boulder and the surrounding areas have continued to be a tourism draw, touting much of the same natural attractions that early tourists also sought. In addition, the growth of CU Boulder has added to the number of attractions in the area. In 2013 it was estimated that just in the city of Boulder, tourism generated a total economic impact of nearly \$420 million. Most of the visitors were overnight visitors, whether staying in commercial lodging options or with friends, with approximately 36 percent of all visitors just coming for the day to experience some of the features in Boulder. This study in 2013 of just the economic impacts of tourism in Boulder shows the important role tourism continues to play in Boulder and Boulder County today.

⁹⁵ RRC Associates, Inc., "Boulder Convention and Visitors Bureau 2013 Economic Impact of Tourism" (prepared for Boulder Convention and Visitors Bureau, March 2014).



⁹⁰ Colorado Tourism Council, "Tourism White Papers, Number 2," August 9, 1976, Tourists, Printed Materials, 1970-1979, BHS 328 B219 F02, Boulder Carnegie Library.

⁹¹ Colorado Tourism Council, "Tourism White Papers, Number 4," September 10, 1976, Tourists, Printed Materials, 1970-1979, BHS 328 B219 F02, Boulder Carnegie Library; Colorado Tourism Council, "Tourism White Papers, Number 1," August 1, 1976, Tourists, Printed Materials, 1970-1979, BHS 328 B219 F02, Boulder Carnegie Library.

⁹² Colorado Tourism Council, "Tourism White Papers, Number 4."

⁹³ Colorado Tourism Council, "Tourism White Papers, Number 2"; Colorado Tourism Council, "Tourism White Papers, Number 1"; Schultze, "The Rockies Are an Old Tourist Lure."

⁹⁴ Schultze, "The Rockies Are an Old Tourist Lure."

6. Post-World War II Boulder County

World War II was responsible for an unprecedented amount of growth in Front Range Area, Boulder County. A high federal presence brought steady, good paying jobs to the area during the war, and many people chose to stay after its conclusion. They were attracted by the federal agencies and offices that made the Front Range area their permanent home, the growing economy, and the amenable climate and lifestyle that proximity to the mountains afforded. During that same period CU Boulder grew, as did various private and public research institutions. During the war approximately 6,000 students learned Japanese at CU Boulder, when the Navy transferred its language program from the University of California Berkeley to CU Boulder. Returning soldiers took advantage of the educational stipends offered by the GI Bill by enrolling in colleges and universities across the country, and CU Boulder was no exception. The university also expanded its research offerings during the postwar period, creating the Upper Atmosphere Lab (UAL) for space exploration in 1948, incorporating the Institute of Arctic and Alpine Research (INSTAAR) into the university in 1951, and founding the Joint Institute for Laboratory Astrophysics (JILA) in 1962. Numerous other research entities were also added during the postwar period, including the Institute for Behavioral Science (IBS) in 1957 and both the Institute for Behavioral Genetics (IBG) and the Cooperative Institute for Research in Environmental Sciences (CIRES) in 1967, the latter of which was created so academic and governmental researchers from the National Oceanic and Atmospheric Administration (NOAA) could work together.96 The research entities not only attracted additional students to the Boulder area, but also enticed connected industries with their associated jobs.

In 1954 the National Bureau of Standards (NBS) opened a new radio building in Boulder, purposefully selecting the location because of the few surrounding radio transmissions and proximity to a university. The Central Radio Propagation Laboratory (CRPL), as the facility was named, employed 450 people, who relocated from Washington, D.C. to Boulder. This number only grew. NBS employees and their families constituted 3,325 people of the Boulder population by 1960, making it the third largest employer in the city. Another government agency chose the area near Boulder as its base when the Rocky Flats Nuclear Weapons Factory opened south of Boulder in 1952. Non-governmental companies were also attracted to the area because of both the proximity to the university and the high government presence. Ball Brothers Research Corporation and Beech Aircraft both chose Boulder for offices that opened in the 1950s. When Ball Brothers opened in 1955, it became "Boulder's largest employer outside of the University, with over 3,000 employees on the payroll." In 1967 the National Center for Atmospheric Research (NCAR) opened on Table Mesa, and nine years later IBM built a plant for the System-360 computer along Diagonal Highway north of Boulder, employing 4,200 individuals.

Boulder and its burgeoning economy was easily accessed by the Boulder Turnpike, which opened in January 1952. For 25 cents commuters could travel the newly constructed toll road, meaning they could more easily live in one of the many newly established residential subdivisions in Boulder, Broomfield, Louisville, and other Boulder County communities and work in Denver and the surrounding area, and vice-versa. The ridership of the new road surpassed expectations. It was originally expected that 2,500



⁹⁶ Bryant and Schomig, "Historic Context and Survey of Post World War II Residential Architecture Boulder, Colorado."

⁹⁷ Bryant and Schomig, 95.

cars would drive on the road; however, ridership quickly reached 7,000 cars, and "by 1966 13,774 vehicles were driving on the toll road per day." With the ridership far surpassing expectations, the \$6.3 million worth of bonds needed to build the road, along with the \$2.3 million in interest, were paid off 15 years ahead of schedule, in 1966.⁹⁹ Individuals from Denver and the Front Range communities could quickly and easily access all the amenities Boulder and its mountains to the west had to offer.

Boulderites and Front Range residents were no exception to the national trend experienced in the postwar era of increased leisure time and an effort to fill that time not only with relaxation but with learning new skills via do-it-yourself projects. It was becoming more and more common in the postwar era for American families to not only have their suburban ranch close to work, schools, and amenities, but also a second home, or vacation home, where they could relax and spend time together as a family. The combination of national trends, the proximity and easy access to high population centers with disposable income and time, forward thinking intellectuals, and of course the beautiful mountain setting made 1960s Boulder County the perfect location to embrace the latest trend in architecture: the A-frame.



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⁹⁸ Bryant and Schomig, 91.

⁹⁹ Bryant and Schomig, 91.

7. A-frame Architecture in Boulder County

A. Church examples

While the vast majority of A-frame examples in Boulder County are residential, a few non-residential examples that utilize the distinctive form exist or were once standing in the county but have since been demolished. A vast majority of the non-residential examples found while conducting research were located within the Boulder city limits. In Boulder several churches, including the Mountain View Methodist Church at 355 Ponca Place (1960, see Figure 15), which was designed by J.W. Noacker, and the Methodist Student Center at 1290 Folsom Street (1965), by famed Boulder architect Hobart D. Wagener, use the form, with its high peak, to inspire patrons to look upwards toward the heavens. ¹⁰⁰ Another example is located in Nederland, at the Calvary Chapel Nederland (see Figure 16). This building, located at 275 Highway 72, appears to be a Delta Vacation Home pre-fabricated residential A-frame that was later converted to commercial use and then to a church. ¹⁰¹



Figure 15. Mountain View Methodist Church. 102

^{102 &}quot;Property Search," accessed December 1, 2017, http://maps.boco.solutions/propertysearch/.



¹⁰⁰ "Mountain View Methodist Church Begins Services in New Building," *Boulder Daily Camera*, January 1960.

¹⁰¹ "Welcome to Calvary Chapel Nederland," accessed November 23, 2017, http://calvarychapelnederland.org/history.html.



Figure 16. The Calvary Chapel Nederland appears to be a Delta A-frame on the left portion on the building, with multiple additions to the right. 103

B. Commercial examples

In the commercial context, the A-frame form was applied to everything from car dealerships to fast food restaurants. Again, a majority of these examples were located within Boulder's city limits. Arnold's Auto Mart on 28th Street beckoned patrons to "look for the little red A-frame" (see Figure 17).¹⁰⁴ Golden Point utilized an A-frame topped with a tall golden spire to attract diners to try their hamburgers and sandwiches when they opened in 1960 (see Figure 18).¹⁰⁵ Like others across the country, including the International House of Pancakes chain, which opened a location in Boulder in 1966 (see Figure 19), Boulder businessmen knew that the A-frame stood out, and employed the form as a way to get a leg up on the competition. The A-frame was used as an orienting feature in the cityscape and lent itself to commercial businesses as a way to stand out from competitors. Unfortunately, there are no known extant commercial examples in Boulder County.



¹⁰³ "Welcome to Calvary Chapel Nederland."

¹⁰⁴ "Leasing Co. Has Ordered Liquidation of 30 Cars" from Boulder Daily Camera, January 3, 1964 page 13. Arnold's Auto Mart.

¹⁰⁵ "Grand Opening," *Boulder Daily Camera*, May 12, 1960.



Figure 17. Arnold's Auto Mart (nonextant) advertisement, January 3, 1964. 106

¹⁰⁶ "Leasing Co. Has Ordered Liquidation of 30 Cars," *Boulder Daily Camera*, January 3, 1964.





Figure 18. Advertisement for the grand opening of The Golden Point (nonextant), May 12, 1906. 107



Figure 19. Advertisement for the grand opening of The International House of Pancakes (nonextant), May 22, 1966.¹⁰⁸

¹⁰⁸ "Grand Opening, The International House of Pancakes," *Boulder Daily Camera Focus Magazine*, May 22, 1966.



¹⁰⁷ "Grand Opening."

C. Residential A-frame architecture

Boulder was viewed as an avant-garde city in terms of its acceptance of modern architectural styles. Drawn to the community by the quality of living, educational opportunities, and its reputation as an open-minded "intellectual and artistic gathering place," architects in Boulder during the postwar era were heralded for their "individuality and creative genius." For a city of its size, Boulder was home to large number of "sophisticated and cutting-edge" architects, reflective not only of the fact that CU Boulder had an architecture school, but also of the number of intellectual patrons willing to commission new and exciting designs not only for their businesses, but more often than not, for their private residences. Many clients were individuals of financial means, and open and excited to try new ideas. Boulderites were welcoming of a variety of mid-century modern architectural styles and types, and the A-frame was no exception.

The oldest extant examples of A-frame architecture in the county were constructed in 1960 and are located at 73 Lab Road, 4246 Lee Hill (which has been heavily modified), and 1706 Old Townsite Road. Examples from 1961 show architects taking an early stab at the unique form, including 1412 Sunshine Canyon Road by architect Richard Brown and 2935 3rd Street by John Thacker. Architects found the A-frame type to be well suited for the rugged terrain west of Boulder because of the form's versatility and ability to nestle within hillsides (see Figure 20). In speaking of his design for the Laybourn house at 2935 3rd Street, architect John Thacker relayed how he "used the ingredients already there—the very steep lot, the exceptional view..." in order to come up with the soaring elevated A-frame design employed on the house on the western edge of Boulder's city limits. Architects practicing in Boulder at the time also wished to emphasize the assets available in the setting, including the ample year-round sunshine, the proximity of the mountains, and, obviously, the views. The A-frame form, which often included an entire wall of windows, clearly addressed those desires.

¹¹² Ellen Bull, "Soaring Roof Marks E.P. Laybourn Home," Boulder Daily Camera, June 17, 1961. 8



¹⁰⁹ Ellen Bull, "Boulder's Cliff-Hanging Houses," *Denver Post Contemporary Magazine*, May 10, 1964. 16.

¹¹⁰ Michael Paglia, Leonard Segal, and Diane Wray, "Modern Architectural Structures in Boulder: 1947-1977," Context and Survey Report (Prepared for the City of Boulder Planning Department and the Boulder Landmarks Preservation Advisory Board, June 1, 2000). 10.

¹¹¹ Bull, "Boulder's Cliff-Hanging Houses." 22.



Figure 20. 71 Stinky Gulch Road, Nederland, showing how the A-frame home nestles into the topography. This A-frame is not yet attributed to an architect or kit supplier. 113

Furthermore, the A-frame was well suited to Boulder County's constantly changing and often extreme weather. As noted in a 1964 article highlighting some of the unique architecture on the cliffs west of Boulder, sunlight and hail often damaged traditionally employed painted wood siding.¹¹⁴ The A-frame, with its two expansive planes covered in roofing material, limited the amount of painted siding subject to these stresses. In addition, the steep pitch of the A-frame roof sloughed the heavy snows, a feature that is particularly helpful in residences that were often used as second/vacation homes and not occupied or easily maintained during the winter months. Boulder architects practicing during the 1960s and 1970s were acutely aware of the unique setting and climate challenges of the area. As local architectural writer Ellen Bull noted, architects working in the Boulder area at the time developed "a building not quite like any other anywhere. The very difficulties he faces stimulate his imagination and ingenuity." Several architects felt the A-frame fit the bill to address the needs of their clients while creating a design adequately suited to its setting.

D. A-frame architects in Boulder County

Several known architects designed A-frame residences in Boulder County in the 1960s and 1970s. Most of the architects, however, were not known for their residential designs, but rather their commercial, governmental, and religious works. Their foray into A-frames appear to be rare examples of the architects experimenting with and utilizing the distinctive form.

Richard Brown, who eventually was a partner in the firm Brown Brokaw and Bowen, attended CU Boulder. His firm was largely known for its recreation center and school designs; however, Brown had an



^{113 &}quot;Property Search," accessed December 1, 2017, http://maps.boco.solutions/propertysearch/.

¹¹⁴ Bull, "Boulder's Cliff-Hanging Houses," 20.

¹¹⁵ Bull.

interest in modern home design.¹¹⁶ This interest was manifest in the two known A-frame homes he designed in Sunshine Canyon, including one at 880 Sunshine Canyon (see Figure 63), which has been altered so that it is no longer an A-frame, and 1412 Sunshine Canyon (see Figure 21). The current integrity level of 1412 Sunshine Canyon is unknown. It appears Brown designed and built 1412 Sunshine Canyon for his own family.

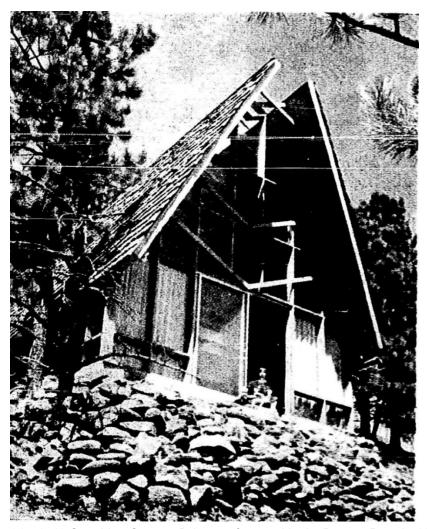


Figure 21. 1412 Sunshine Canyon Drive, as featured in the Denver Post in 1964.117

Famed Boulder architect Hobart D. Wagener built the unique A-frame as the Methodist Student Center at 1290 Folsom Street in 1965 (see Figures 22 and 23), as was previously discussed on page 39. Wagener was a product of the University of Michigan School of Architecture, and following service in the Navy during World War II and a brief period working in New York and Portland, Oregon, he and his wife settled in Boulder in 1950. Wagener worked with James Hunter in Boulder before establishing his own firm. While Wagener designed multiple residential properties, there are no known residential A-frame



¹¹⁶ "Brown Brokaw Bowen | AspenModern," accessed November 17, 2017, http://www.aspenmod.com/architects/brown-brokaw-bowen/; Bull, "Boulder's Cliff-Hanging Houses."

¹¹⁷ Bull.

examples attributed to him in Boulder County. His portfolio includes "over 200 public and private buildings including St. John's Episcopal Chapel, First Methodist Sanctuary, Fairview High School, Presbyterian Manor Apartments, Fruehauf Garden Center [and]...the First National Bank," as well as CU Boulder Kittredge Dormitories and Williams Village. 118

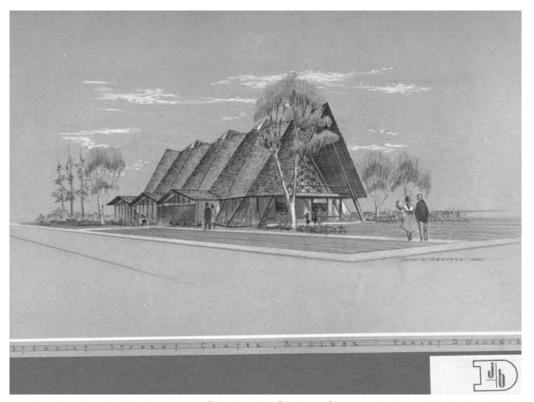


Figure 22. Drawing by Jack L. Beavers of Methodist Student Center, designed by Hobart D. Wagener, 1290 Folsom Street. 119

¹¹⁹ Jack Beavers, *Methodist Student Center*, n.d., n.d., Virtual Photograph Collection, Jackson Beavers Design drawings, Call #999-17-5 Photo, Boulder Carnegie Library.



¹¹⁸ "Hobart D. Wagener's Obituary on Denver Post," Denver Post, accessed November 23, 2017, http://www.legacy.com/obituaries/denverpost/obituary.aspx?n=hobart-d-wagener&pid=15374827.



Figure 23. The north side of Methodist Student Center, 1290 Folsom Street. 120

Another prominent A-frame in Boulder County was constructed by popular Boulder architect Wallace "Wally" Palmer. Like Brown, Palmer was a graduate of CU Boulder and did not specialize in residential designs. He is most known for his commercial and office designs. Palmer worked for Wagener prior to starting his own firm with Jack Bishop and later Jim Copeland. His only known foray into the A-frame residential style in Boulder County was a striking building with a jointed roof that failed to form a complete peak at the top, constructed at 594 Wild Horse in 1965 (see Figures 61 and 62). The building was recently so heavily modified that no indication of the former A-frame shape remains.

The Horizon Building Company, which designed many unique homes in the hills to the west of Boulder, particularly within the West Highland Park subdivision, was responsible for designing and building at least six known A-frame type homes from 1965-1967 within the aforementioned subdivision. The Boulder based company "gained a region-wide reputation for its architectural concepts." The company was regarded as cutting edge and "radical" in the region, when it introduced a luxury, all-concrete home "with pre-stressed, pre-cast concrete twin-T post and slab construction" in 1967, a method previously limited to high-rise buildings. 121 Many of the company's A-frame home designs were built as permanent residences, rather than the small mountain vacation home typical of most of the A-frames seen across the county. Their A-frame designs strayed beyond just the typical triangular form, integrating clipped and gambrel forms as well as unique angles that allowed homes to nestle neatly into the mountainous terrain on the western edge of the city. Unfortunately, many of the Horizon Building Company A-frame homes have been demolished or heavily modified in the recent years. The remaining Horizon Building Company homes with A-frame elements all appear to have alterations so most no longer stand as good representatives of a pure A-frame design.



¹²⁰ theDenverEye, "Methodist Student Center," theDenverEye, March 30, 2018, http://www.thedenvereye.com/methodist-student-center/.

¹²¹ "New Concrete Home a 'First,'" *Denver Post*, October 2, 1967.

Other architects known to have designed A-frames in Boulder County include John Thacker, who designed an imposing residential example at 2935 3rd Street, and J.W. Noacker, who was responsible for the Mountain View Methodist church at 355 Ponca Place (as previously discussed on page 39). It is likely that other architect-designed examples exist; however, they are not known or yet attributed.

While there are a handful of A-frames in Boulder County known to have been designed by architects, many others were the product of local builders and contractors. Multiple individuals are listed on A-frame building permits and completed one or two residential A-frames in Boulder County; however, it is often difficult to distinguish if the name is that of an architect, builder, or contractor. Two A-frame houses are attributed to Richard Paquette and R.J. Affolter each, while Mountain Home Construction on Magnolia Road also built at least two homes. Daniel Roy and Gerald Goins together owned and constructed four A-frame houses in the Walker Ranch area. While their four A-frames are located near each other, there is no evidence that the two undertook a large development effort, or utilized the same design for their four A-frames. Several examples of A-frames in the county have been attributed to specific architects and/or contractors; however, the majority appear to have been small, secondary vacation homes and the product of do-it-yourself plans, kits, or prefabricated houses.

E. Local kit/prefab providers

As the 1960s progressed, the A-frame type became more mainstream. The simple form was not just employed by architects. In keeping with the national trend, do-it-yourself kits were advertised in the local papers and prefabricated models were available for purchase. The *Boulder Daily Camera* noted that second home ownership did not have to be cost prohibitive, as simple cabins could be constructed for as little as \$2,000.122 Costs could be further trimmed by building vacation homes in phases, cutting out the need to wait for a large down payment or upfront investment. Additional finishes could be completed later, so enjoyment of the second home could be accelerated. 123 Kits were advertised as easily altered with subsequent additions, but assembled immediately for "great promise for early enjoyment." 124 A-frames soon became a common form in Boulder County for the increasingly ubiquitous mountain vacation cabin.

There were many providers of A-frame plans on a national level, and individuals need only write to one of the many that advertised in places like *Popular Mechanics*, *House Beautiful*, *Woman's Day*, and *Mechanix Illustrated*. *Sunset* magazine, a leading Western lifestyle publication, often featured A-frame designs and included an advertisement by RED-E-CUT LOGS of Oakland, California, for A-frame plans for \$1 in its shopping section (see Figure 24). Several franchises of kit and prefabricated distributors were located in the Denver metropolitan area, including a known franchise of Leisure House, the A-frame design made popular by John Campbell, and Lindal Cedar Homes.



¹²² "Two Home Trend for Families Is Increasing," Boulder Daily Camera, January 30, 1960, 15.

¹²³ "New Concrete Home a 'First,'" *Denver Post*, October 2, 1967. 8.

¹²⁴ "Sound Investment in Leisure Family Living," *Boulder Daily Camera*, June 15, 1961. 13

¹²⁵ "A' Frame," *Sunset*, June 1963. 247.



Figure 24. Red-E-Cut Logs A-frame advertisement in Sunset magazine, June 1963. 126

Many national lumber companies were affiliated with local stores and businesses through which they sold their A-frame plans and kits. Bestway Building Centers was a division of Boise Cascade Company and had a location at 29th and Walnut in Boulder. The one-stop building supply store, akin to the Home Depots and Lowes of today, prominently advertised an A-frame named "The Birches," which featured two stories and 650 square feet. The interior of the house, which cost \$3,112, could be customized to accommodate two or three bedrooms depending on the needs of the family. In keeping with the popular trends of the time valuing plenty of outdoor space, The Birches prominently featured a large deck, and the model was described as fitting "nicely into any mountain background." The prefabricated kit, which was heralded as easy to assemble, could quickly, easily, and affordably fit the mountain setting and terrain, a notion the *Denver Post* described as one of the unique challenges Boulder architects faced head-on. The Birches and other prefabricated A-frame kits allowed individuals to achieve similar results faster and more economically. Bestway Building Center allowed customers to begin construction and enjoyment of their second mountain home with only 10 percent down and five years to complete payments, a much more affordable and faster option for many than commissioning an architect for unique plans (see Figure 25).



^{126 &}quot;Red-E-Cut-Logs 'A' Frame," Sunset, June 1963.

¹²⁷ "Sound Investment in Leisure Family Living," 13.



Figure 25. Bestway Building Center advertisement, June 15, 1961.

Hogsett Lumber Company, which had locations in Boulder, Greeley, and Longmont, was affiliated with Tree Life Forest Products. In an ad from the *Boulder Daily Camera* special *Sunday Focus Magazine* on June 27, 1965, the company prominently featured an A-frame cabin with a deck, noting that "prices start at less than you think" (see Figure 26).¹²⁸ If a buyer was not up for completing the job by themselves, Hogsett was happy to recommend contractors to help.

¹²⁸ "Hogsett Lumber," Boulder Daily Camera Focus Magazine, June 27, 1965. 11





Figure 26. Hogsett Lumber Company advertisement, June 27, 1965. 129

A company named Basic-Bilt also offered 25 models for year-round or vacation homes, at least one of which was an A-frame. Basic-Bilt partnered with local companies where customers could select their model and have it constructed to the level they wanted, depending on their budgetary constraints and the amount of the project they wished to do themselves. ¹³⁰ It is unknown who the Basic-Bilt supplier in the Boulder County area was; however, at least one home in Boulder County, located at 833 Hemlock Drive, was constructed based on Basic-Bilt plans BB-1406 (see Figures 27 through 30).

¹³⁰ R.C. Cramer Lumber Co., "New Low Prices Now for Spring on Lumber and Building Materials," *The Pocono Record*, April 17, 1962.



^{129 &}quot;Hogsett Lumber."



Figure 27. Basic-Bilt A-frame brochure, BB-1406.131

¹³¹ Basic-Bilt, "A-frame Vacation Home Basic-Bilt Brochure," n.d., Cathy Faughnan Personal Collection.





Figure 28. Basic-Bilt A-frame brochure, information on home building services. 132



¹³² Basic-Bilt.



Figure 29. 833 Hemlock Drive, Unincorporated, front exterior. 133



Figure 30. 833 Hemlock Drive, interior view from loft. 134

¹³³ Cathy Faughnan, "833 Hemlock Drive, Front Exterior," n.d., Cathy Faughnan Personal Collection.

¹³⁴ Cathy Faughnan, "833 Hemlock Drive, Interior View from Loft," n.d., Cathy Faughnan Personal Collection.

The notion of completing your own do-it-yourself A-frame was so mainstream that individuals need only look as far as the classifieds section in the local *Boulder Daily Camera* newspaper and call for an A-frame kit, which started at just \$795.¹³⁵ There were many options available in Boulder and the surrounding area for those getting started in their quest to build a mountain vacation home, from simple plans to kits to fully prefabricated homes that required minimal assembly.

F. "Imagineered vacation homes": Delta vacation homes

In 1959 Lawrence "Bud" Stoecker started a part-time A-frame kit business in Boulder County, which would ultimately be responsible for the construction of 600-700 A-frames in Colorado and the greater Rocky Mountain Region. In Boulder County alone at least 32 A-frames are attributed to Delta Vacation Homes, making it the single most popular known A-frame supplier in the county. It is likely that additional A-frames could be attributed to Delta Vacation Homes with further research.

Stoecker was born in 1927 and obtained a structural engineering degree from CU Boulder. He and his wife Charlotte (Lollie) had five children: a daughter and four sons, who would play an important role in his future business. Following graduation from CU, Bud went to work for multiple engineering companies in the Boulder area. From 1955-1960 he was employed at Beech Aircraft in Boulder, where he worked on the Mercury and Apollo projects for NASA. It was during his time at Beech that he met Joe Connelly. Connelly and Stoecker partnered to start Delta Vacation Homes in 1951, an A-frame kit house company that they worked on during weekends out of a small barn on South Boulder Road. As a trained structural engineer, Stoecker developed plans and drawings for modest A-frame houses. He and Connelly would then pre-cut and assemble kits with all the pieces necessary for do-it-yourselfers to assemble their own A-frame houses. The result was what Stoecker referred to as "imagineered" mountain cabins, a phrase he utilized at least a year before it was popularized by Disney (see Figure 31).¹³⁶

DELTA PRESENTS =

ITS 1961 LINE OF IMAGINEERED PRECUT MOUNTAIN CABIN KITS

Figure 31. Title of Delta Vacation Homes' 1961 brochure, featuring the "imagineered" phrase. 137

Being a structural engineer, Stoecker was aware of and interested in the triangular shape. He designed triangular modern Christmas trees for his family, and even built A-frame shaped go-karts for his children. More practically, he ultimately settled on the A-frame form for his kit houses because of its inherent strength, ability to shed the Colorado snow easily from the building's roof, and the ease with which individuals could assemble the kits themselves. The lightweight form of the A-frame allowed for the kits to be easily transported by truck to the building locations. Stoecker constructed one of the early models in the backyard of his family's house at 2651 Valley View Drive in Westminster so he could photograph each construction step for inclusion in the kit instructions.

¹³⁷ Delta Vacation Homes, "Delta Presents," 1961, Steve Stoecker personal collection.



¹³⁵ "A-frame Mountain Cabin Kits," *Boulder Daily Camera*, February 22, 1964, 20.

¹³⁶ Steve Stoecker, "Delta History," November 14, 2017.

During the initial early years of Delta Vacation Homes, only two models were available. The Alpine measured 16 feet wide by 24 feet deep and offered 384 square feet, and the Contemporary measured 20 feet wide by 32 feet deep and offered 640 square feet of living space. These two models, which were rolled out during the timeframe when Delta Vacation Homes was a part-time side business, were originally only offered as kits for the owner to assemble themselves. The kit provided just a shell of an Aframe, and the customer was completely responsible for finishing the interior, painting, constructing any decks on the exterior, and obtaining permits and inspections. The early versions of the Alpine model kit, which could be assembled in two to three days, included scalloped trim around the windows and the front fascia of the A-frame. With the exception of this decorative feature, the early kits were very minimal and simplistic. For just \$795 and a long weekend, you could construct your entire Alpine A-frame, complete with foundation, door, windows, covered porch, and sleeping loft accessible by ladder (see Figure 32). The Contemporary, which cost \$1,495, included a partitioned bedroom or bathroom as well as a built-in breakfast bar and sliding glass doors, in addition to the features available in the Alpine, like the sleeping loft (see Figure 33). Appendix D provides additional Alpine Vacation Homes brochures and ephemera.

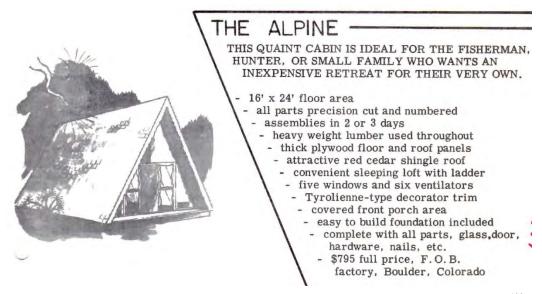


Figure 32. The Alpine model as shown in the 1961 Delta Vacation Homes brochure. 139



¹³⁸ Delta Vacation Homes, "Delta Presents."

¹³⁹ Delta Vacation Homes, "Delta Presents."

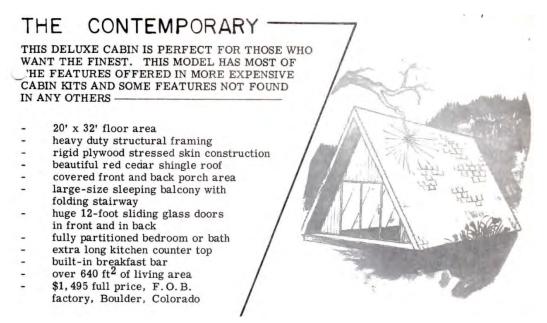


Figure 33. The Contemporary model as shown in the 1961 Delta Vacation Homes brochure. 140

By 1963 two additional models were added to the collection available from Delta Vacation Homes. The Alpine was still available in the 16-foot-wide by 24-foot-deep version for the same price as 1961; however, a 16-foot-wide by 32-foot-deep version was added for \$995. Likewise, the Contemporary was still available in the 20-foot wide by 32-foot-deep version for the same price as 1961. By 1963, however, a 20-foot-wide by 40-foot-deep version was offered for \$1,745. The 1963 price sheet also added the Chalet model (20 feet wide by 40 feet deep for \$2,495 or 20 feet wide by 48 feet deep for \$2,745), which included a kitchen, bath, two bedrooms, and a fireplace. Deviating from their typical A-frame offerings, the 1963 price sheet also includes the Vista model, which was a flat roof, "California inspired" cabin that included two bedrooms, a bathroom, kitchen, fireplace, and board and batten styling, as well as an expansive deck across the front accessed by large banks of sliding windows. The Vista was also offered in two measurements: 32 feet deep and 20 feet wide for \$2,295 and 40 feet deep and 20 feet wide for \$2,570. Additional options for the Vista were available, including a gabled roof, for an additional charge. Although Delta Vacation Homes offered this single non-A-frame design, it is estimated that over 90 percent of what the company sold was of the A-frame type.

During the early years of Delta Vacation Homes, Connelly and Stoecker still maintained their full-time jobs, with Stoecker transferring to Ball Aerospace and then to a cryogenics engineering company in Denver, all while working on the A-frame kits on weekends and when time allowed. In 1964 Stoecker determined it was time to leave his job and devote his full-time attention to the A-frame business. That year, Delta Vacation Homes constructed its shop and office building on Industrial Lane, directly off the Boulder Turnpike (see Figure 34). Stoecker and Connelly were strategic and smart in the location selection for their business, as hundreds of motorists on the Boulder Turnpike, which was completed just

¹⁴² Steve Stoecker, interview with ARCH Professionals, LLC., October 12, 2017.



¹⁴⁰ Delta Vacation Homes, "Delta Presents."

¹⁴¹ Delta Vacation Homes, "1963 Price Sheet," 1963, Steve Stoecker personal collection.

12 years prior, would drive past their shop with the distinctive A-frame models lined up in front and eye-catching "Delta" sign atop the building, providing them with invaluable exposure (see Figure 35).

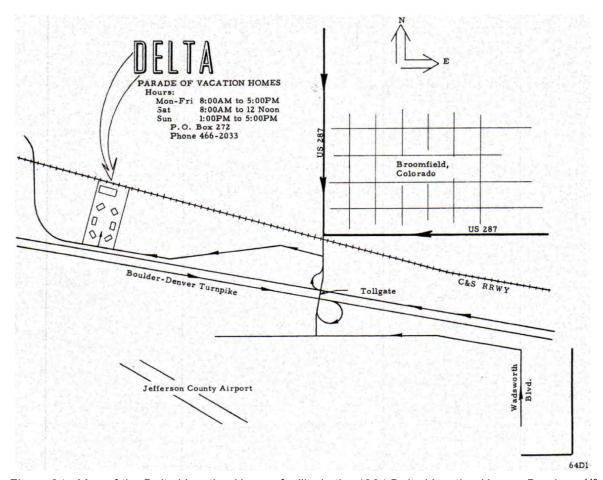


Figure 34. Map of the Delta Vacation Homes facility in the 1964 Delta Vacation Homes Brochure. 143



Figure 35. Delta Vacation Homes Facility as it appears today, 3801 Industrial Lane, Broomfield, Colorado.

¹⁴³ Delta Vacation Homes, "Delta Imagineered Vacation Homes 1964 Brochure," 1964.



With the opening of their shop, Stoecker and Connelly were able to expand the business from solely supplying kits to offering complete on-site installations. The factory allowed Delta Vacation Homes to precut and prepare every item necessary for the erection of an A-frame, and supply a crew of four people that was dispatched with all the necessary materials to assemble the A-frame in seven days. With all the materials pre-cut, crews "never used a saw," although they carried one in case something broke onsite. 144 These crews often consisted of Stoecker's sons, Steve, John, and Dean, who served as crew chiefs. Given seasonal constraints and the inability to haul heavy trucks of materials up dirt and mud mountain roads during certain times of the year, erection by Delta A-frames crews was limited to summer months, and occasionally during winter and spring breaks, when Stoecker's sons were off of school and available to assist with construction. Those buildings constructed in the winter and spring were moreoften built in the Boulder area or other locations closer to the shop, as they required less driving over treacherous roads and less driving time, meaning they could be completed in the often-shortened breaks available from school. Bud's son Steve Stoecker estimates that Delta Vacation Homes crews erected about 30-35 A-frames each year, moving each week to a new job site in a carefully orchestrated scheduling sequence that allowed for crews to collect trucks of materials from the factory in Broomfield, travel to the job sites, and construct a complete A-frame in seven days before turning around to do it all again.

With the clear busy season of the business in the spring/summer, Bud Stoecker utilized the fall and winter to measure, cut, and assemble all the parts for the construction of a Delta Vacation Home. He would buy materials directly from the lumberyard, and he and his sons would load boxcars worth of plywood and lumber to their cars and drive it to the factory. Bud would also have sliding glass doors shipped in, as well as the massive amounts of cedar shingles used on all the A-frame models. Materials were purchased for the year in bulk based on the number of orders he already received, and speculating on the additional homes he would sell centered on the last year's sales. Delta would "live with material price fluctuations throughout the year and simply absorb the increases [themselves], always keeping [their] vacation home prices fixed for the entire calendar year as shown in [their] sales brochure." Given the trying economic times and unforeseen increase on the cost of lumber and lumber products, Delta Vacation Homes was forced to raise rates mid-year in 1973 by adding a \$0.42/square foot surcharge to each order.

Sales were busiest during the fall, when orders were taken for the next year. It was imperative for customers to place their orders early so they could be added to the construction schedule and guaranteed a house in spring or summer. Once the materials that had been purchased in bulk were allocated to a project, no additional homes would be built and a customer would have to wait until the following year. It was beneficial, then, for customers to order early and get on the schedule to ensure home delivery when they desired.

With crews assembling models, Delta Vacation Homes was able to offer additional larger models beyond those just available as kits. When the company expanded in 1964, so did the number of models available. While the Alpine model was still available for the do-it-yourselfer, the larger models were all



¹⁴⁴ Stoecker, interview with ARCH Professionals, LLC.

¹⁴⁵ L.R. Stoecker, April 1, 1973, Steve Stoecker personal collection.

primarily constructed by Delta Vacation Homes crews. Initially, these larger models were only available for construction by a Delta Vacation Homes crew; however, later they were available as kits. 146

For the most part, the width of the homes is what differentiated the models, which all contained an upstairs sleeping balcony or loft and, with the exception of the Alpine, the distinctive sliding glass doors on the gable end of the first floor. As models got taller and afforded the space, a picture window was also included in the second story above the sliding door. The larger models included a deck with a signature angled railing with an integrated bench designed by Bud Stoecker (see Figure 36). Customer customization of their selected model came by varying the depth of the building. Because all kits were pre-measured, which provided an economy of scale, no substitutions were allowed. Options including insulation, balcony extensions, fireplaces, aluminum windows with screens, closet kits, and plastic bubbles, or skylights, for roof modifications were available for additional fees, as well as interior mahogany paneling, and selecting between a metal spiral staircase or a traditional wooden staircase. During the early years of Delta Vacation Homes, they also offered a foundation system, although that later changed when customers were required to provide their own foundation prior to crews arriving to assemble the home on-site.¹⁴⁷



Figure 36. Deck on Delta Vacation Home A-frame with signature angled railing and integrated bench.

128 Cabin Creek Road, Unincorporated.

The 1964 Delta Vacation Homes brochure still included the Alpine, Contemporary, and Chalet models at the same sizes and prices as offered the previous year; and upgraded changes were made to the Vista

¹⁴⁷ Delta Vacation Homes, "Delta Imagineered Vacation Homes 1964 Brochure."



¹⁴⁶ Stoecker, interview with ARCH Professionals, LLC.

(non-A-frame) model. In addition, the 1964 brochure added the Chateau and Duo-Villa A-frame models, which were not offered for the do-it-yourselfer, but required installation by a Delta Vacation Homes crew. The Chateau model was a large three-bedroom home, measuring 24 by 40 feet and fully erected with electrical, three-piece bathroom, five sliding patio doors, a kitchen with breakfast bar, range, and oven, free-standing fireplace, and 6- by 24-foot deck with bench, for \$4,995 (see Figure 37). Other larger options, measuring 48 or 56 feet in length, were available for \$5,395 or \$5,795 respectively.

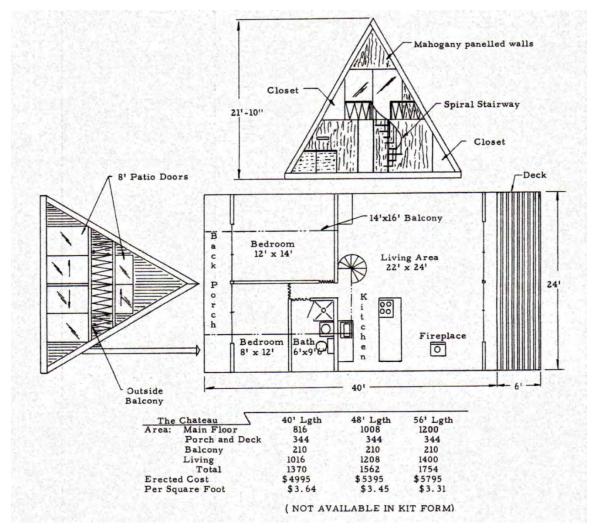


Figure 37. Plans for the Chateau Model from the 1964 Delta Vacation Homes Brochure. 148

The 1964 brochure also offered the Duo-Villa model, which was described as "the apartment with that DELTA A-frame flair...[and] perfect for the senior citizen, the just married couple or even the playboy types" offered two versions: an apartment configuration with a kitchenette, or a motel unit configuration, which omitted the kitchen. The Duo-Villa, which basically divided a large 20- by 48-foot A-frame in half, offered an income-producing arrangement with minimal upfront investment (see Figure 38). The motel-unit model cost \$4,995 fully erected while the apartment lay-out cost \$5,995.

¹⁴⁸ Delta Vacation Homes, "Delta Imagineered Vacation Homes 1964 Brochure."



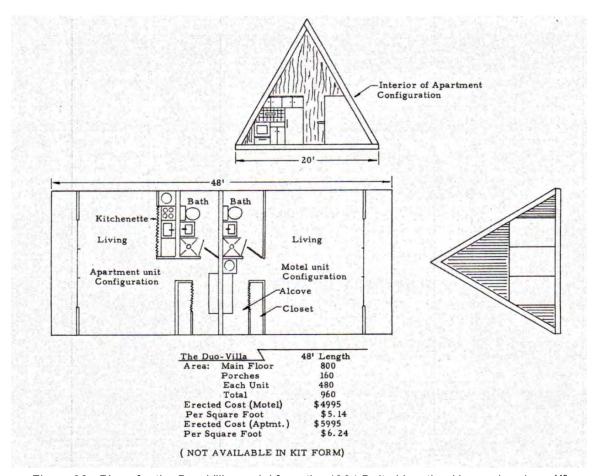


Figure 38. Plans for the Duo-Villa model from the 1964 Delta Vacation Homes brochure. 149

Once customers selected their model, they were responsible for obtaining a foundation on their property that met the specifications Stoecker provided for their model, and passing local inspections on the foundation. When the foundation was inspected and passed, Delta Vacation Homes crews would head to the site and erect the entire house shell. When Dirk Beal, whose family built an A-frame in the mountains of Boulder County as a summer vacation home, was eight years old (see Figures 39 through 41), he remembers seeing the massive flatbed truck driving up the mountainside to deliver his family's new A-frame. A few days later, the house was done. 150

Dirk Beal's family perfectly exemplified the typical Delta Vacation home customer. Dirk's father, George Beal, Beal was a college professor in Iowa and spent a great deal of time searching for the perfect vacation property in Colorado. He eventually found just the spot in north Boulder County, near Allenspark. With a site selected, Beal needed a low-cost, quickly built home that required little maintenance, as the family only planned to spend one month a summer in Colorado. An A-frame by Delta Vacation Homes checked all the boxes, and could accommodate the difficult terrain of the property while maximizing on the breathtaking views of the surrounding mountains (see Figure 42).¹⁵¹



¹⁴⁹ Delta Vacation Homes, "Delta Imagineered Vacation Homes 1964 Brochure."

¹⁵⁰ Dirk Beal, phone interview with ARCH Professionals, LLC., November 1, 2017.

¹⁵¹ Beal, phone interview with ARCH Professionals, LLC.



Figure 39. Exterior of the Beal A-frame at 128 Cabin Creek Road, Unincorporated, a Delta Vacation Home. This is likely a Chateau model based on the four sliding glass doors on the first floor, spiral staircase, and number of bedrooms. Note the unique setting of the house built atop a rock outcrop, and the angled deck railing.



Figure 40. Siting of the Beal A-frame atop a steep rock promontory. Note the concrete block foundation constructed atop the rock promontory.





Figure 41. Front elevation of the Beal A-frame.

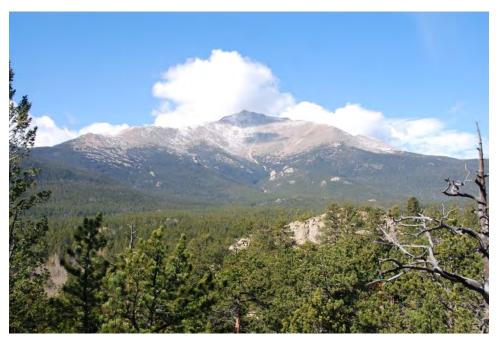


Figure 42. View from the front deck of the Beal A-frame. The home was selected for the site and to capture the impressive view from the deck and through the expansive windows on the front elevation.

Crews used a P1-11 tongue and groove paneling on the gable ends, which gave the buildings a board and batten look, while the roof surfaces were all clad in cedar shingles (see Figures 43 and 44). All Delta Vacation Homes models erected by their crews came with electrical and plumbing completed, and the electrical inspection was often the most challenging part of the construction process for the Delta Vacation Homes crews. Over the years, Stoecker had established a relationship with inspectors across the entire state. The more Delta Vacation Homes that were built, the more interaction he had with them, providing them with detailed drawings of the models prior to construction so they were pre-cleared, communicating with them about the building specifications, and scheduling inspections for the seven-day window while crews were erecting the A-frames. According to Steve Stoecker, there were discrepancies with the inspections less than a dozen times over all the years Delta Vacation Homes was building A-frames, which is fortunate as it would be costly and inconvenient to require additional trips to job sites once crews had already moved on to the next location.



Figure 43. Exterior detail of the Beal A-frame showing the unpainted siding panels that give the effect of board and batten siding.



Figure 44. The Beal A-frame showing the cedar shingles utilized on roof. Note the addition to the side.

With inspections completed, homeowners were able to finish the A-frame to the level and expense they wanted. To have their vacation home completed so quickly was viewed as a great positive to working with Delta Vacation Homes. Steve Stoecker noted, "people thought it was great. They could see it go in one weekend and come back the next and it was done," ready to personalize with their own finishes and enjoy. Homeowners were responsible for painting the exterior gable ends, installing flooring and carpeting, and completing interior finishes. It was the perfect compromise for middle-class do-it-yourselfers. All the major items were constructed for them; they were just left to complete the finishes.

When the crews wrapped up work at the Beal property in 1967, the family was left with a fairly turnkey house. They elected to keep a fairly simple interior with exposed rafters and support structure (see Figure 45). As the home was only used for one month during the summer, the minimal insulation was not a problem. Over the years, the family made a few improvements, including a small addition constructed in the late 1970s/early 1980s that added additional space for the kitchen and a laundry room, and because of the siting on the top of a large rock, the house was susceptible to strong wind gusts, so they constructed a header across the sliding door on one of the gable ends to provide reinforcement (see Figure 46). Otherwise, the Beals loved the minimal upfront work and long-term maintenance the house required.¹⁵³



¹⁵² Stoecker, interview with ARCH Professionals, LLC.

¹⁵³ Beal, phone interview with ARCH Professionals, LLC.



Figure 45. Interior of the Beal A-frame showing the metal spiral staircase, exposed interior rafters, and plywood paneling.



Figure 46. Rear of the Beal A-frame showing bracing on the rear gable. The plywood and horizontal header beams above were later modifications to strengthen the building from the wind gusts experienced at the top of the rock promontory.

Delta Vacation Homes had the A-frame construction business down to a science: from ordering materials in bulk, to pre-measuring components and assembling materials into kits, to erecting and obtaining inspection approvals in seven days. The efficiency with which the homes were erected is the reason they were so popular. Individuals did not need to wait to have an architect draw up plans, or go through the headache of getting plans approved by the inspector if they were building themselves. They could visit Delta Vacation Homes, select their model, and quickly have a vacation home to fit their needs and budget.

The company did not advertise much. Its prime location off the Denver-Boulder Turnpike, with models prominently displayed for all those driving to the CU Boulder football games or making their daily commute on the turnpike, proved quite effective. Dirk Beal distinctly remembers the factory on the north side of the turnpike, with the exhibit of A-frames in front.¹⁵⁴ That withstanding, each year Delta Vacation Homes would purchase a small advertising space in the *Denver Post* or *Rocky Mountain News* vacations section. The company also exhibited its vacation homes at the Colorado Garden and Home Show. The



¹⁵⁴ Beal, phone interview with ARCH Professionals, LLC.

biggest advertisement for the company, however, was a completed A-frame. Neighbors saw a Delta Vacation Home quickly erected on the lot down the street and wanted one of their own.¹⁵⁵

By 1967 Bud Stoecker and Joe Connelly had a falling out. Stoecker offered to sell Connelly his half of the business, but Connelly rejected the offer, saying the price was too high. Stoecker then offered to buy Connelly's share for the same price, and Connelly accepted. From that point on, Stoecker was the sole owner of Delta Vacation Homes. With the exception of a single employee, George Horiucci (sic), Delta Vacation Homes was run completely by Stoecker. From payroll and taxes, to sales and advertisement, to design and scheduling, to coordinating with local building inspectors, he was a jack of all trades. He was also a certified plumber and electrician. 157

Delta Vacation Homes customers included Boulder County residents that did not want to live within the city of Boulder and preferred a quieter life in the mountains but with an inexpensive price tag. But more often it was Front Range residents and out of state vacationers looking for an affordable house to place on their mountain property. Most customers already owned some land in the mountains and were looking for an affordable way to put a house on their property. As Steve Stoecker noted, the Delta Vacation Homes A-frames were not built as large family homes or as investment properties, but rather seasonal homes for couples and small families. Very few Delta Vacation Homes were initially constructed with the intention of serving as a full-time residence.

Throughout the years the models offered by Delta changed, with additional dimensions added to different model offerings. The 1972 Delta Vacation Homes price list shows two variations on the Vista model: the Vista and the Super-Vista. 158 Other models were eliminated altogether. By 1982 the available models had been trimmed down to just four: the Alpine, the Chalet, the Chateau, and the Savoy, the largest A-frame offered by Delta. The Savoy measured from 28 by 44 feet to 28 by 72 feet and included four full bedrooms, one and three-quarters bath, a kitchen, dining room, and living room spread across two floors. The largest version of the Savoy cost \$18,734 fully erected in 1982. Various options added to the cost. For around \$20,000 a property owner could erect a three- to four-bedroom house on their property, making Delta Vacation Homes still an appealing, low-cost option for home construction. 159 Although the original do-it-yourself Alpine model was still available in 1982, the emergence of the large Savoy reflected the changing desire to construct a full house in the mountains, beyond just the simple cabins erected 20 years prior.

Delta Vacation Homes erected A-frames across Colorado, mostly on a "customer-to-customer" basis. 160 The company was not affiliated with any developers in particular. Bud Stoecker did, however, purchase approximately 40 acres of land in South Park that he subdivided and then constructed several A-frames



¹⁵⁵ Stoecker, interview with ARCH Professionals, LLC.

¹⁵⁶ Stoecker, "Delta History."

¹⁵⁷ Stoecker, interview with ARCH Professionals, LLC.

¹⁵⁸ Delta Vacation Homes, "1972 Price List," 1972, Steve Stoecker personal collection.

¹⁵⁹ Delta Vacation Homes, "Delta Vacation Homes 1982 Brochure," 1982, Steve Stoecker personal collection.

¹⁶⁰ Stoecker, interview with ARCH Professionals, LLC.

on. The company also built a large number of A-frames in Breckenridge below the dam, and Silverthorne. The distinguishable sliding glass door and centered second-story window found on the larger models are easily recognizable as Delta Vacation Homes designs. The angled deck railing with integrated bench seating is also an identifying feature of Delta A-frames.

While 99 percent of the Delta A-frames were distributed in Colorado, the company did construct a few in Wyoming and Nebraska, along with a few kits that were sent to Idaho. 161 Most Delta A-frames were used as single-family residences and vacation homes; however, a small hotel complex of six or seven Delta Vacation Homes A-frames was built outside of Jacksonhole, Wyoming. It is unknown if these A-frames are extant.

The company continued producing A-frame kits well into the 1980s. Stoecker eventually retired in 1983. His last project constructed six A-frames in Lafayette (705-709 Baseline Road) that he used as apartments. The rental income from the apartments supported him through his retirement. His son John then took over the business for a few years before Bud sold the factory and office building and the business closed. The last known Delta Vacation Home A-frames in Boulder County were built in 1986, following Stoecker's retirement. The business was truly a family run company, with his children helping and paying their way through college by working on summertime construction crews, to eventually taking over. What started as a small, part-time, A-frame kit business run out of an old barn grew to be a "the #1 manufacturer and builder of A-frame homes for recreational and year 'round living." Delta A-frames was not only a major supplier of A-frame homes in Boulder County and the greater Rocky Mountain Region, but is responsible for leaving a lasting impact on the Colorado landscape.

G. The peak of the A-frame in Boulder County

Year built data for the known A-frames in Boulder County was gleaned from Boulder County Assessor records. This information, however, was not available for four of the 180 known A-frames in the county. The earliest known A-frames were constructed in 1960. The form remained fairly common, particularly in the mountainous areas of the county, through the early 1980s. The majority of A-frames were constructed by 1986, with a scattering of additional A-frames built in 1988, 1992, and 1998. A large number of A-frames was constructed in the mid-1960s, with 38.7 percent of all A-frames with known construction dates in the county built between 1964 and 1967. Numbers of newly constructed A-frames remained relatively even during the late 1960s and early 1970s. An interesting spike in construction occurred in 1983, when 11 new A-frames were built in the county. After 1983 the number of newly built A-frames dropped significantly, with few to no new A-frames constructed annually (see Figure 47).



¹⁶¹ Stoecker, interview with ARCH Professionals, LLC.

¹⁶² Delta Vacation Homes, "Delta Vacation Homes 1982 Brochure."

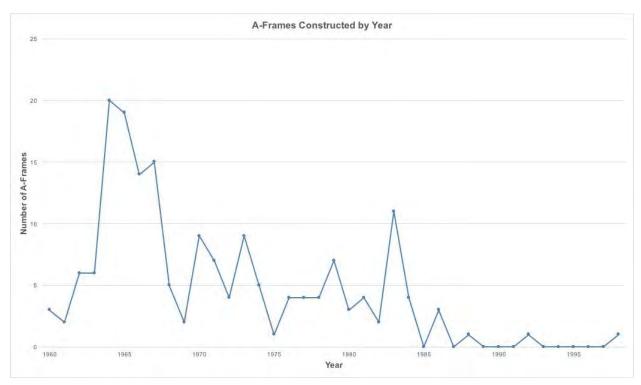


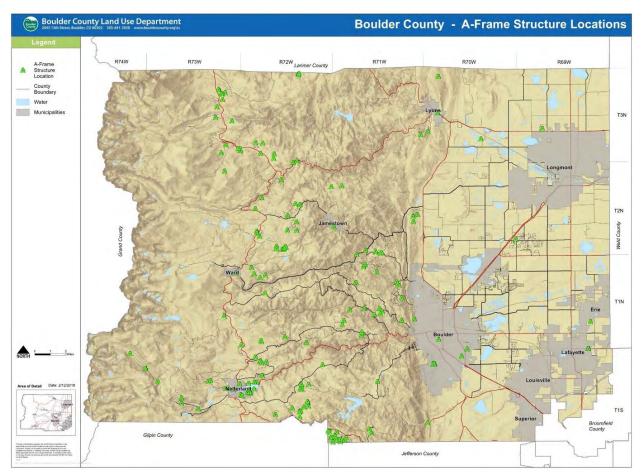
Figure 47. Graph showing A-frame construction in Boulder County by year. Note: year built data was not available from the Boulder County Assessor records for four properties.

Delta Vacation Homes remained a popular choice within Boulder County nearly that entire time, with the earliest known Delta prefabricated home built in 1964 and the final completed in 1986. The construction of Delta Homes was relatively evenly spaced throughout this time, with a largest number of homes built in 1983 (five houses) and 1971 (four houses). Currently, 32 A-frames are attributed to Delta Vacation Homes by building permits, owner information, various interviews, or limited field survey efforts, accounting for 17.8 percent of all known A-frames in the county. It is likely that more of the known A-frames can be attributed to Delta Vacation Homes through additional research and surveys of individuals properties. Appendix E provides a table of properties attributed to Delta Vacation Homes.

H. Geographic concentrations

A-frames can be found all across Boulder County but are predominant in the mountainous areas. A few can be found in and around the eastern communities of Erie, Lafayette, Longmont, and Niwot; however, the type appears to be most popular in the mountains to the west, where it can easily nestle against the terrain. Nine extant examples are located within the Boulder city limits. The rest are scattered across the mountains and communities west of Boulder, with small concentrations located in multiple areas. With the exception of four residences owned and constructed by the same individuals and located near each other, no other major correlation seems to exist between the geographic concentrations of A-frames in certain areas.





Map 2. Map showing locations of all known A-frames in Boulder County.

Most of the A-frames are located on private property; however, at least one known example of an A-frame is located on federal land within Boulder County (5BL9817). This A-frame is located in the Arapaho-Roosevelt National Forest in the Rock Creek Canyon summer home group, a group of "recreation residences" built by private individuals on federal land through a special use permit (see Figure 48). The presence of this seasonal-use A-frame, with its steeply pitched gable roof, spoke to the durability of the structure and its ability to withstand the often-heavy snows experienced in the remote mountainous area without regular maintenance that is unavailable in the national forest during winter months. Another A-frame located on public land is situated at 12191 61st Street and is owned by Boulder County. The building was originally constructed as private residence in 1966 and currently rented out by the County.

¹⁶³ "The Cabin Program - National Forest Homeowners," accessed February 15, 2018, http://www.nationalforesthomeowners.org/default.asp?page=Cabin_Program&DGPCrPg=1&DGPCrSrt=7D.





Figure 48. Rock Creek Summer Home Group Lot K (5BL9817), Arapahoe and Roosevelt National Forest, August 1, 2004.¹⁶⁴

Close concentrations of privately owned A-frames are located in the Ward Area, particularly near James Creek and the Gold Lake Fill Ditch, where nine A-frames were built between 1964 and 1971. Ten A-frames spanning from 1964 to 1971 were constructed in close proximity to one another in the Walker Ranch area near Pinecliffe and Wondervu. Four of those residences were built and owned together by Daniel Roy and Gerald Goins. North of Allenspark, in the Cabin Creek area, is a concentration of seven A-frames with different or unknown builders. While it is unknown why these concentrations of A-frames are located in these areas, it likely is reflective of the trend during the 1960s and 1970s to purchase mountain property for a second home, what property was available at the time, and the popularity of the A-frame, rather than specifically related to a particular developer or builder working in these areas.

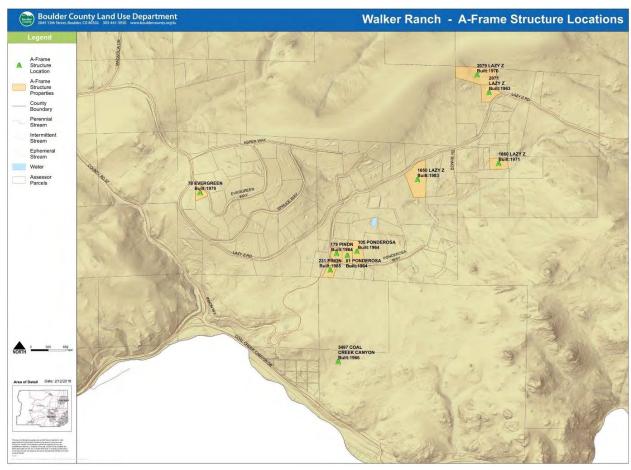
¹⁶⁴ Jamie Clapper and Tony King, "Rock Creek SHG Lot K Hicks (5BL9817)," July 20, 2004, Architectural Inventory Form, Colorado Office of Archaeology and Historic Preservation.



A-frame Architecture in Boulder County



Map 3. Map showing geographic concentration of A-frames in the Ward Area.

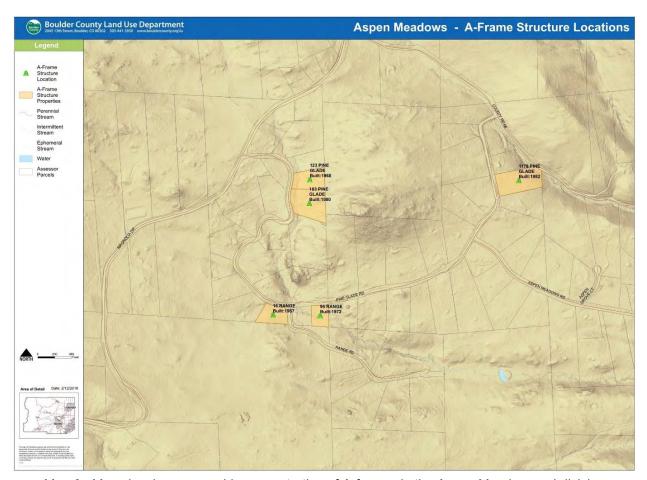


Map 4. Map showing geographic concentration of A-frames in the Walker Ranch Area.



Map 5. Map showing geographic concentration of A-frames north of Allenspark, near Cabin Creek Road.

While the previously mentioned concentrations are not located in specific subdivisions, there are platted areas that reflect a dense concentration of A-frame residences. The Aspen Meadows subdivision, located east of Nederland, contains 25 lots and was platted in 1966 by Paul M. Wiesner, Charles J. Becker and Gerald C. Burkhart. The subdivision features five A-frames, with at least two constructed by Delta Vacation Homes and one by Mountain Home Construction. Given the diversity of builders, it does not appear that Aspen Meadows required homebuilders to work with a specific architect, builder or contractor.

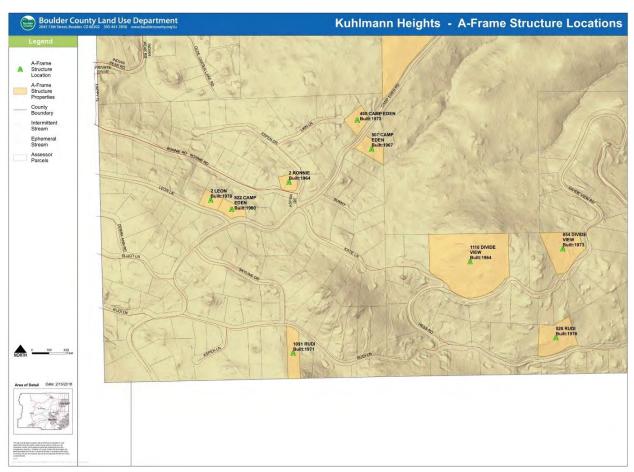


Map 6. Map showing geographic concentration of A-frames in the Aspen Meadows subdivision.

Another subdivision with a large concentration of A-frames that did not require property owners to work with specific architects or builders was Kuhlmann Heights. The first addition of Kuhlmann Heights, which is located in the Coal Creek Canyon area, was platted in 1955, with the third section filed just two years later in 1957. Emrich Rudolph (Rudi) Kuhlmann, his wife Elsie, and Sylvia Shimley platted Kuhlmann Heights with covenants that deemed only single-family properties were to be constructed, and they must be larger than 400 square feet on the ground floor. The Kuhlmann Heights subdivision was not their first foray into mountain development, as Rudi and Elsie Kuhlmann were partially responsible for the development of other subdivisions in Coal Creek Canyon including Sylvan Heights and Georgian Woods in 1952 and Vonnie Claire Heights, Blue Mountain View, and Lillis Lane in 1953. With the exception of the minimum ground floor square footage requirement dictated in the subdivision covenants, there is no other known requirement of owners to work with specific builders or to construct in a certain style. Ten A-frames are located in Kuhlmann Heights, built between 1964 and 1980 by at least four distinct builders. A majority of the A-frame examples in Kuhlmann Heights are more modest in massing and design.

¹⁶⁵ Cathleen Norman, "Historic Contexts Report 1999-2002 Cultural Resources Survey of Unincorporated Jefferson County" (Preservation Publishing, Lakewood, CO: for Jefferson County Historical Commission, Jefferson County Archives and Records Management, Jefferson County Planning and Zoning Division, December 30, 2002), 112.



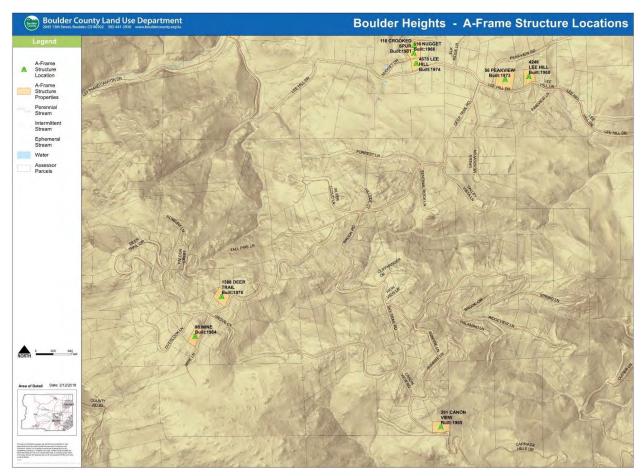


Map 7. Map showing A-frames within the Kuhlmann Heights subdivision.

The Boulder Heights subdivision is located 6 miles northwest of Boulder along Lee Hill Road and features five A-frame buildings. The A-frames in Boulder Heights also were built by a variety of different builders or contractors, with four different builders identified. The first addition of Boulder Heights was opened in 1957 as the product of Boulder developer Bill Stasick. Stasick is responsible for a large number of developments in Boulder including Pine Valley, Lyons Park Estates, Lyons Valley Park, Pine Brook Hills, and Carriage Hill Estates. As his first foray into the Boulder real estate development business, he purchased the land that would become Boulder Heights with a partner, Joe Ernie, in 1957. Prior to becoming Boulder Heights, the 1,000-acre tract of land was the Johnson Ranch. After they purchased the property, they worked with a Denver financier so they could begin development. The first addition opened to prospective residents in 1957, with a grand opening for the second addition held the following year. The A-frames within Boulder Heights appear to be more substantial in massing and involved in design, indicating they may have been used as primary residences, and may have been more likely to be architect designed, rather than the product of a kit or pre-fabricated.

¹⁶⁶ Frank Gay, "Bill Stasick King of the Mountain," Sunday Camera Magazine, October 14, 1984.



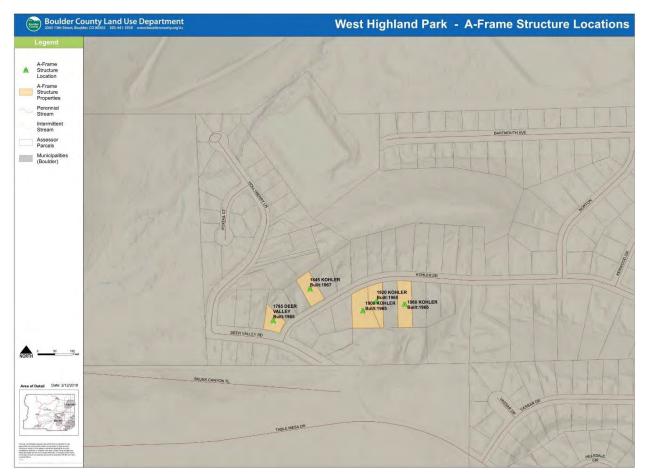


Map 8. Map showing geographic concentration of A-frames in the Boulder Heights subdivision.

The West Highland Park subdivision, within the Boulder City limits, at one point contained at least six A-frames built between 1965 and 1967. West Highland Park was platted in 1964 by the Hall-Irwin Construction Company of Greeley, Colorado. The original Highland Park subdivision was built on either side of Broadway, south of Baseline Road on the former Kohler Farm property. This original portion was acquired in the early 1950s by Turnpike Builders, Inc., a development company based in Greeley. The original Highland Park subdivision consisted of five models of modest postwar homes. ¹⁶⁷ The West Highland Park Subdivision, which was added approximately a decade after the original Highland Park Subdivision was started, contains much larger, architecturally unique residences. The size of the houses and location within Boulder city limits indicates these were likely used as primary residences. Building permits show all of the A-frame houses within West Highland Park were designed by the Horizon Building Company, with an entity referred to as Ellgen sometimes serving as the contractor. A majority of these A-frame homes have been demolished or heavily modified in recent years.

¹⁶⁷ Bryant and Schomig, "Historic Context and Survey of Post World War II Residential Architecture Boulder, Colorado," 110-111.





Map 9. Map showing geographic concentration of A-frames in the West Highland Park subdivision.

One platted development within the Nederland city limits, Big Springs, contains a high concentration of A-frames (nine) in the county. Big Springs was initially platted by Big Springs Co. in 1963, with the third filing platted four years later in 1967. The development frequently advertised its "magnificent" lake and alpine view properties in the *Boulder Daily Camera* newspaper (see Figure 49).¹⁶⁸

¹⁶⁸ "Magnificent Alpine and Lake View," Boulder Daily Camera Focus Magazine, July 19, 1964, 6.



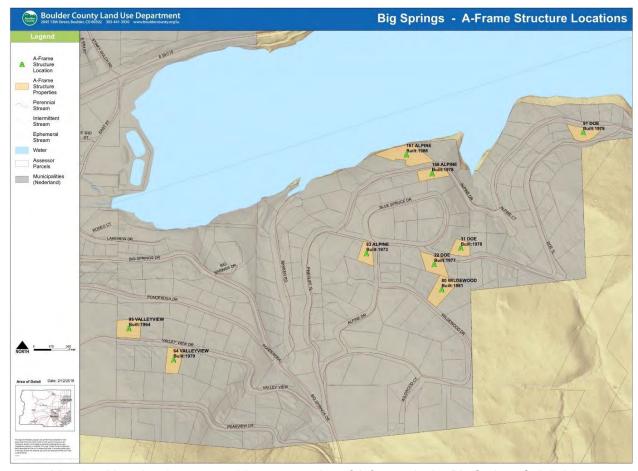


Figure 49. Big Springs Park Subdivision advertisement, Boulder Daily Camera, September 20, 1964. 169

The Big Springs development also exhibited one of its models in the 1965 Home and Garden Show in Denver, undoubtedly attracting Denver metro families to Boulder County to consider purchasing mountain vacation home property. The 330-acre development offered sites from 1 to 5 acres on which they would construct cabins from several models. Given the concentration of A-frames within the subdivision, it appears that at least one A-frame design was included within their models to choose from. As the focus of this study was unincorporated areas within Boulder County, the Big Springs development and the A-frames within it were not studied at length.

^{169 &}quot;Exclusive Alpine and Lake Shore Sites," Boulder Daily Camera, September 20, 1964.





Map 10. Map showing geographic concentration of A-frames in the Big Springs Subdivision.

I. Boulder County's unique/rare A-frames

There are a few examples in Boulder County that, upon initial review, appear to be relatively unique, or rare, either because of their type, history, or materials used. Because of the few remaining unaltered architect-designed examples, those A-frames that can be definitively tied to a specific architect are considered rare within the county as well (see Figures 50 through 56). The remaining A-frame by Richard Brown at 1412 Sunshine Canyon Drive appears to be an intact, high-style example of an A-frame within the county, as well as 2935 3rd Street designed by John Thacker. The A-frames within West Highland Park subdivision are all examples of high style, architect designed A-frames. Further research is necessary to determine the extent of alterations to these homes, and whether any retain sufficient elements of their original design to serve as good examples of high-style, A-frame architecture.



A-frame Architecture in Boulder County









Figures 50 through 53. Examples of larger, architect designed A-frames in Boulder County. Clockwise from top left: 1412 Sunshine Canyon Drive, Unincorporated; 2935 3rd Street, Boulder; 1785 Deer Valley Road in the West Highland Park Subdivision, Boulder; 1845 Kohler Drive in the West Highland Park Subdivision, Boulder.¹⁷⁰

¹⁷⁰ Bull, "Boulder's Cliff-Hanging Houses"; Jessica Fasick, *Photograph of 2935 3rd Street*, November 2017, November 2017, Boulder County Land Use Files; "Property Search."









Figures 54 through 56. Examples of larger, architect designed A-frames within the West Highland Park Subdivision in Boulder. Clockwise from top left: 1900 Kohler Drive, 1920 Kohler Drive, 1960 Kohler Drive. 171

As the only multi-family A-frame examples in the county, the A-frames built by Bud Stoecker at 705-709 Baseline Road in Lafayette are unique (see Figure 57). There are also very few examples in the county to employ the arched (gothic) roof form, as found in 83 Alpine Drive in Nederland. Finally, although many examples in the county are built upon a full-story basement, providing additional living space or storage, few have been found that are supported on piers, as exemplified in 520 Rudi Lane (see Figure 58). Further individual evaluation of various A-frames will likely identify additional rare and unique types, unidentified during the brief reconnaissance effort completed during this project.



¹⁷¹ "Property Search."



Figure 57. 709 Baseline Road, Lafayette. Example of multi-family A-frame. 172

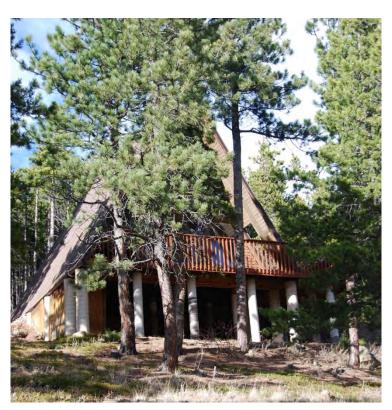


Figure 58. 520 Rudi Lane, Unincorporated. Note the piers supporting the deck and roofline.



¹⁷² "Property Search."

J. Decline of A-frames in Boulder County

A-frame construction in Boulder County had largely ceased by the mid-1980s, with a few outliers constructed during the 1990s. Multiple factors likely contributed to the demise of the A-frame. The rise of timeshares and condos provided vacationers additional options beyond single-family vacation home ownership. Those still seeking single-family vacation homes were no longer looking for the small, remote cabin in the woods, but rather a true second home with all the space and amenities of their primary residence. This trend is exemplified in the evolution in models offered by Delta A-frames, from the modest Alpine A-frame cabin among the original offerings, to the massive Savoy, a full four-bedroom vacation home available in the 1980s (see Figures 59 and 60). The specifications for the models show that the largest version of the Savoy was nearly five times larger than the largest version of the Alpine model.

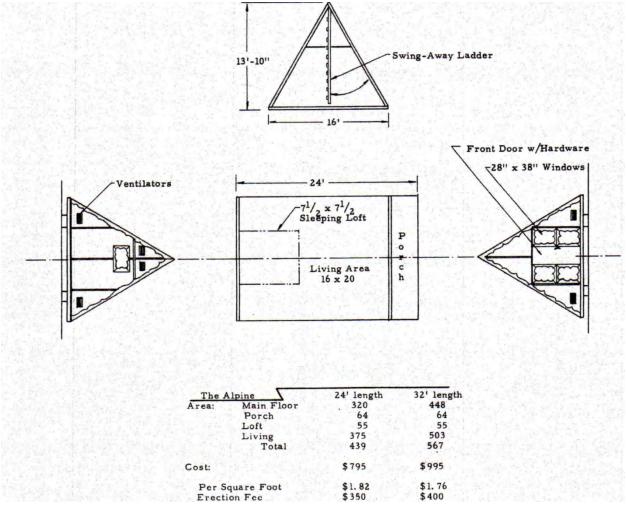


Figure 59. Drawings of the Alpine model by Delta Vacation Homes in 1964.¹⁷³

¹⁷³ Delta Vacation Homes, "Delta Imagineered Vacation Homes 1964 Brochure."



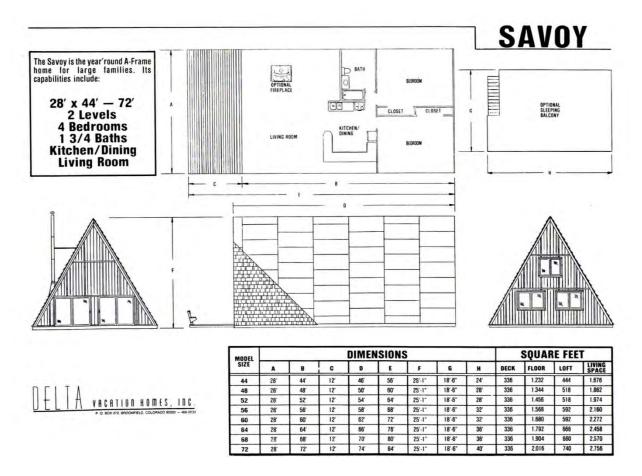


Figure 60. Drawings of the Savoy model by Delta Vacation Homes in 1982-1983. Note the large difference in living square footage (1,676-2,756 square feet) compared to the Alpine model (439-567 square feet) from 1964.¹⁷⁴

New A-frames were no longer built, and extant A-frames were purchased not necessarily for the house itself, but for the land it sat on. When Cathy Faughnan and her family were looking for a mountain home, they were not specifically seeking an A-frame, but rather had a cabin on some water in mind. They ultimately bought their well-maintained A-frame at 833 Hemlock Drive for the land; however, they have come to embrace their A-frame with the scalloped bargeboard and amazing views from the expansive windows. In addition, Cathy's parents owned an A-frame elsewhere in Colorado, contributing to a homey and nostalgic feeling toward her new family vacation home.¹⁷⁵

Randl also notes the decline in A-frame popularity was a result of "changing tastes and fading fashion...to some, the A-frame was a spent trend, an idea whose time had passed." Other more practical aspects likely played a role as well. As Caroline Burr, the owner of the A-frame at 8343 West Fork Road noted, their A-frame lacks storage. She has to get creative in order to find a place for all their supplies, and



¹⁷⁴ Delta Vacation Homes, "Delta Vacation Homes 1982 Brochure."

¹⁷⁵ Cathy Faughnan, "A-frame," November 30, 2012.

keeps "kitchen pans in the linen closet; kitchen appliances in the laundry room." There is also the issue of headroom, with owners noting they were forced to lean over in upstairs bedrooms because of the angled roof, and the "unusable space in the 'corner' triangles." In addition, rodents would often nest under the roof overhangs of homes that were only occupied seasonally. Poor insulation and ventilation was also noted by homeowners as problematic. Despite these complaints, many homeowners still value and enjoy their A-frames, especially the views captured through the often-expansive windows, the cathedral height ceilings, and the cozy, intimate feeling their mountain home affords them. The owner of 168 Divide View noted the popularity of their A-frame on Airbnb, perhaps indicating the nostalgia felt for the emblematic building form. With the current trend toward do-it-yourself tiny houses, A-frames are one of many small cabin designs that might meet these demands.

K. Lost A-frames

Boulder County has already lost many excellent A-frame buildings to demolition or extreme alteration to the extent that evidence of the original A-frame building is no longer visible. Many of these losses were architect designed. Notably, 594 Wild Horse Circle, designed by Wallace Palmer, and 880 Sunshine Canyon Drive, designed by Richard Brown (see Figures 61 through 63). In addition, 1905 Kohler Drive, within the Boulder city limits, was also demolished (see Figures 64 and 65). Located within the West Highland Park subdivision, it was likely the design of Horizon Homes. A more modest example at 75 Sugarloaf was also demolished.



Figure 61. 594 Wild Horse Circle, Unincorporated, prior to demolition. 178

¹⁷⁸ Wallace Palmer, "Exterior of 594 Wild Horse Circle," n.d., 594 Wild Horse Circle File, Boulder County Land Use.



¹⁷⁶ Caroline Burr, "A-frame Architecture in Boulder County Survey," October 16, 2017.

¹⁷⁷ Phillip Stern, "Re: Your A-frame!," November 24, 2017.



Figure 62. 594 Wild Horse Circle prior to demolition. 179



Figure 63. 880 Sunshine Canyon Drive, Unincorporated, prior to remodel. 180

¹⁸⁰ "Sunshine Canyon A-frames," M. Gerwing Architects, accessed November 17, 2017, http://mgerwingarch.com/m-gerwing/2011/05/13/sunshine-canyon-a-frames.



¹⁷⁹ Wallace Palmer, "Interior of 594 Wild Horse Circle," n.d., 594 Wild Horse Circle File, Boulder County Land Use.



Figure 64. 1905 Kohler Drive, before demolition. 181



Figure 65. 1905 Kohler Drive, interior, before demolition. 182



¹⁸¹ "1905 Kohler Dr, Boulder, CO 80305 | Zillow," accessed December 1, 2017, https://www.zillow.com/homedetails/1905-Kohler-Dr-Boulder-CO-80305/13181588_zpid/.

¹⁸² "1905 Kohler Dr, Boulder, CO 80305 | Zillow."

8. A-frame Character-defining Features, Variations, and Subtypes in Boulder County

A. What is and is not an A-frame

(1) Nuances of what is and is not an A-frame

A typical A-frame seems simple enough to define: a small, simple, triangular-shaped building. As the project progressed, however, variations of the type began to appear that posed difficult questions as to what is, and what is not, a true A-frame. The unique angles and lines utilized in modern architecture during the 1960s and 1970s can cause confusion when determining whether a building is an A-frame, or whether it simply employs unique geometric lines and roof structures common to more general designs of the era.

As a result, the project team developed a simple definition of an A-frame based on the relationship between the A-shaped roof truss system and the building's main living space. An A-frame is a building with a steeply pitched, symmetrical roof truss system that accounts for at least one-third of the main living story wall. A knee wall, which prevents the roof structure from extending completely to the ground or floor level, may be present. The knee wall may not account for more than two-thirds of the height of the main floor. A garden-level basement or garage may be present underneath the A-frame, but the A-frame roof truss system must still account for at least one-third of the main living floor. Buildings that include half an A-frame truss or an asymmetrical A-frame truss are not considered A-frames.

When determining whether a building is an A-frame type, it is also important to keep in mind the dimensions of a structure. A-frames as a type are meant to function primarily as cabins and vacation homes. As such, typical A-frames should be less than 1,000 square feet. Larger A-frames are likely to be modified A-frames, or architect-designed subtypes of A-frames. If a building includes an A-frame form as a component of a larger building, the A-frame form must be the primary element of the building to be a good example of the A-frame type.

(2) Examples

(a) Relationship between roof truss and main living story

Buildings that have steep-pitched, A-frame-like rooflines must have main living story walls that do not exceed two-thirds of the full story height. If rooflines do not extend along at least one-third of the main living story, the building in question is not an A-frame (see Figures 66 and 67).

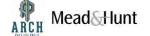




Figure 66. 1088 W Kelly Road, Unincorporated. This building was not considered an A-frame. It has a steeply pitched roof; however, the walls on the first floor are nearly full height. 183



Figure 67. 118 Grizzly Drive, Unincorporated. This building is considered an A-frame. Although it has knee walls preventing the roofline from reaching the ground, the knee walls do not constitute more than two-thirds the height of the full main floor. In addition, early assessor's notes of the interior show an open first floor with a loft, typical of A-frame designs.¹⁸⁴



¹⁸³ "Property Search."

¹⁸⁴ "Property Search."

(b) Truncated or clipped peaks

The A-frame form may be clipped or truncated at the peak; however, the intent of the steeply pitched roof truss must still be apparent (see Figure 68).



Figure 68. 115 Park Street, Lyons. This building is an example of a flat-top or clipped A-frame. 185

(c) A-frames as part of larger building

Many buildings that incorporated elements of the A-frame form were identified (see Figures 69 through 72). However, the A-frame form is often surrounded by a larger building or is a small part within a larger addition. As the quintessential A-frame is a modest-sized, cabin-like building, roughly 500-800 square feet, it is likely that these larger, more extensive examples in which the A-frame only comprises a small portion of the entire building were architect-designed, high-style examples experimenting with the form, or represent later additions and alterations. One exception to this is the modified A-frame, which consists of the A-frame form with wings on one or both sides of the A-frame.



¹⁸⁵ "Property Search."



Figure 69. 0 B&M Street, Ward. This property is not considered an A-frame. While the original A-frame form is visible within the roofline of the building, multiple large additions have nearly encapsulated the A-frame form. 186



Figure 70. 78 Evergreen Way, Unincorporated. This property is not considered an A-frame. The A-frame form is visible in the center of the building, but multiple intersecting additions have been added on both sides, perpendicular to the A-frame. 187



¹⁸⁶ "Property Search."

¹⁸⁷ "Property Search."



Figure 71. 1845 Kohler Drive, Boulder. This represents a high-style, architect-designed example of experimentation with the A-frame form. While multiple additions and alterations were made to the residence over the years, the A-frame form is still visible on the far left of the building. The basic A-frame form is still retained as the main massing of the building, with a smaller, mirror A-frame located parallel to the main A-frame. This building is considered a high-style example of an A-frame. 188



Figure 72. 101 Hickock Trail, Unincorporated. This building is considered a modified A-frame. It has wings on the side; however, these wings do not dominate the building and the A-frame form is still the focus of the building.¹⁸⁹



¹⁸⁸ "Property Search."

^{189 &}quot;Property Search."

(d) Asymmetrical roof truss systems

Buildings that feature an extremely pitched roof on one side and more traditional roof framing on the other are not considered A-frames, as they lack the symmetrical roof truss system (see Figures 73 and 74).



Figure 73. 177 Deer Valley Road, Boulder. Note the steeply pitched roof on the right side of the building, creating a "half A-frame" effect. This is not considered an A-frame as it does not employ the symmetrical, triangular A-frame truss structure. 190



Figure 74. 324 Granite Drive, Unincorporated. This example features a steeply pitched roofline in the center of the building, above the entryway. Because the A-frame structure is only executed all the way to the ground on one side, this is not considered an A-frame.¹⁹¹



^{190 &}quot;Property Search."

^{191 &}quot;Property Search."

B. Character-defining features and variations

(1) Discussion of primary character-defining features

The following are the primary character-defining features for A-frame houses:

- A-shaped roof/wall truss system
- Deep, overhanging eaves/gable ends
- Large glazing configurations extending across entire facade of one or more walls
- Wood materials for original wall and roof cladding (asphalt, vinyl, aluminum, or steel typically are replacement materials)
- Expansive porches/decks on front and rear walls
- · Skylights and modest dormer windows on side walls to add interior light
- Foundations of stone, concrete, or presence of wooden or concrete piers to provide storage space of garage below first level
- Concrete knee walls no more than two-thirds the height of the first story
- Stylistic variations such as Swiss elements (scalloped bargeboard or chalet-style decorative features) or Asian-elements (long, narrow wood strips in gable ends, terra cotta roof tiles) (see Figures 82 through 83)
- Rustic elements such as stone chimneys and rough-hewn elements including porches and decks (see Figure 84)

The most important character-defining feature of the standard A-frame is the A-shaped roof/wall truss system. Standard A-frame roof trusses are steeply pitched, often at 60 degrees. Trusses generally extend uninterrupted from the ridgeline of the roof to the foundation, near or at ground level. The A-shaped structure formed by these trusses should be the dominant feature of the standard A-frame building (see Figures 75 and 76).

The gable ends of the standard A-frame usually feature overhanging eaves. One gable end generally features the front entrance and one or both gable ends often feature large glazing configurations, sometimes extending the entire length of the facade. Glazing configurations can vary by climate and location, with more remote A-frames in colder climates sometimes having smaller or no glazing in the gable ends to reduce maintenance and reduce interior heat loss.



Standard A-frame roofs and side walls are usually covered with cedar shingles. Asphalt shingles, aluminum, or steel are often replacement materials. Exterior cladding on gable ends often consists of tongue and groove wood siding, board and batten wood siding, plywood sheathing, or cedar shingles. Foundations are generally stone, natural rock, concrete block, or poured concrete. Foundations can be full foundations or piers.





Figures 75 and 76. Examples of standard A-frames. Left: 3653 Fourth of July Road, Unincorporated.

Right: 847 Hemlock Road, Unincorporated. 192

(2) Character-defining features – Exterior variations

Exterior variations are often found with standard A-frames. These are sometimes related to region or climate. In Boulder County, variations are present in front and rear walls porches and decks, skylights and dormers, foundations and knee walls, and stylistic elements.

(a) Porches

Porches in A-frame houses are common. They are usually found on the front facade and extend the interior living space outdoors. Depending on the location of the main living space, these porches can be at ground level or elevated if the main living space is built on foundation knee walls, allowing for a basement or garage. Exterior loft balconies are also common. These are usually found on the front facade but can also be found on rear and side walls. Occasionally, the area of a loft porch is enclosed to create a garrison A-frame, where the loft portion of the front facade extends out beyond the primary facade surface. This type of variation may be part of the original design or an alteration (see Figures 77 through 79).



^{192 &}quot;Property Search."







Figures 77 through 79. Top: Examples of main-level and loft porches at 49045 Peak to Peak Highway, Unincorporated (left) and 116 Nugget Drive, Unincorporated (right). Bottom: A garrison A-frame where the second story overhangs the first. 1120 Lewis Lane, Unincorporated. 193

(b) Skylights and dormers

One of the most common critiques of the standard A-frame form is the limited amount of light the A-frame roof/walls allow into the interior living space. The use of skylights and dormer windows are a common exterior variation that attempts to alleviate this lack of interior light (see Figures 80 and 81). Larger dormers occasionally also include balconies.



¹⁹³ Photograph of 12191 61st Street, n.d., Boulder County Land Use Files.





Figures 80 and 81. Examples of skylights and dormer windows. Left: 490 Camp Eden Road, Unincorporated. Right: 71 Beaver Creek Drive, Unincorporated.

(c) Stylistic elements

Stylistic elements are also sometimes added to standard A-frame exteriors. Scalloped barge boards are a common variation to A-frame rooflines and are sometimes meant to mimic the decorative style of Swiss chalets. Such decoration might be augmented by other chalet or storybook features such as diagonal glazing patterns in windows or loft balconies with scalloped trim details. Other stylistic details occasionally seen include trim and other exterior details inspired by traditional Asian architecture. These details sometimes include angled gable ends, meant to evoke Asian-style rooflines, multiple roof planes in the forms of dormers, or the use of terra cotta tile to cover roofs. A number of A-frames also exhibit Rustic style details including the use of rough-hewn lumber and stone (see Figures 82 through 84).







Figures 82 through 84. The addition of stylistic elements is a common variation to the standard A-frame. Left: Scalloped barge board and diamond pattern glazing details on 393 Ski Road East, Unincorporated. Upper right: Asian-inspired details on 213 High View Drive, Unincorporated (note the carved front door). Lower right: Rustic details on 98 Mine Lane, Unincorporated. 194

(d) Foundations and knee walls

Standard A-frame foundations are usually minimal, and the A-frame sits close to ground level. Exposed foundations and knee walls, however, are common variations on the standard A-frame in Boulder County because of rocky or steep terrain. Exposed foundations, often constructed when an A-frame is built into a hillside, can have lower levels that are open or enclosed to create garages or basements. Knee walls (not exceeding two-thirds the height of the main living space) are a common way to alleviate difficult to use interior space where roof/walls meet horizontal floors. A-frame trusses may either rest on the foundation knee wall or continue past the knee wall and extend to the ground as exposed rafter tails. Standard A-frames may also be set on wooden stilts or concrete piers (see Figures 85 through 88).



¹⁹⁴ Photograph of 213 High View Drive, n.d., Boulder County Land Use Files.









Figures 85 through 88. Clockwise from upper left: Elevated A-frame and enclosed foundation (91 Doe Trail, Nederland); exposed rafter tails resting on knee wall (98 Mine Lane, Unincorporated); Exposed rafter tails extending to the ground (208 Wild Tiger, Unincorporated); Concrete pier foundation (1120 Lewis Lane, Unincorporated). 195

(e) Other exterior variations

Other exterior variations include notched roof/walls for recessed window and door openings. This is a less common exterior variation but allows for additional natural light to enter the interior and provides entrances on side walls. An additional exterior variation is the placement of a chimney in the gable end of the A-frame.

While most standard A-frames utilize small wood-burning stoves with chimneys vented through the roof/wall, some A-frames feature large Ranch-house style chimneys in one of the gable ends (see Figures 89 and 90).

¹⁹⁵ "Property Search"; Susan Bloomquist, "208 Wild Tiger Road Exterior," n.d., Susan Bloomquist Personal Collection; *Photograph of 12191 61st Street*, n.d., Boulder County Land Use Files.







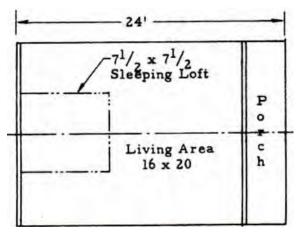
Figures 89 and 90. Additional exterior variations include notched roofs/walls to accommodate recessed window and door openings and the placement of large Ranch-style chimneys in the gable end such as at 12738 Sheramdi Street, Unincorporated. 196

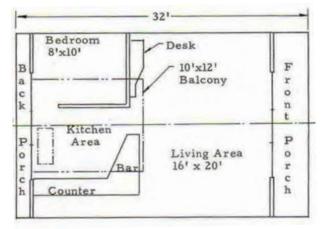
(3) Character-defining features – Interior

The standard A-frame has a characteristically open interior (see Figures 91 and 92). The main living space is usually located on the first floor and consists of an open living room space adjacent to the front gable and large glazing configuration. This living room space is characteristically open to the ceiling rafters. A kitchen, bath, and various service spaces occupy the rear portion of the main floor and feature a standard ceiling. Above the kitchen, bath, and service spaces is a loft area, usually featuring one or two bedrooms. This loft area is usually open to the living room area below. Depending on the foundation, a garage or basement living space may also be present.

¹⁹⁶ Photograph of 12738 Sheramdi Street, n.d., Boulder County Land Use Files.







Figures 91 and 92. Interior plans from Delta Vacation Homes. Left: The Alpine model, featuring the standard A-frame interior of the open main living area and lofted sleeping area. Right: The larger Contemporary model that includes a kitchen and bedroom on the main floor but maintains the open living area on the main floor and sleeping loft above.¹⁹⁷

(4) Outbuildings

Standard A-frames occasionally feature outbuildings that are designed and built to echo the primary A-frame building. These outbuildings can display great variety in form and style but are meant to reinforce the uniqueness of the standard A-frame property type (see Figures 93 through 97). Such outbuildings might include:

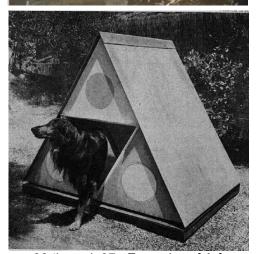
- Garage
- Shed
- Outhouse
- Greenhouse
- Doghouse
- Bird house
- Mailbox
- Playhouse/treehouse

¹⁹⁷ Delta Vacation Homes, "Delta Imagineered Vacation Homes 1964 Brochure," 1964.













Figures 93 through 97. Examples of A-frame outbuildings. Clockwise from upper left: garage at 507 Camp Eden Road, Unincorporated; outhouse at 128 Cabin Creek Road, Unincorporated; garden shed; dog house shown in Sunset: The Magazine of Western Living; and bird house also shown in Sunset: The Magazine of Western Living. 198

¹⁹⁸ Bill Meyerriecks, "Time for Greenhouse Is Right Now," *Boulder Daily Camera*, March 28, 1964; "A-frame Dog House," *Sunset*, January 1967; "The Dog Likes It," *Sunset: The Magazine of Western Living*, February 1959, 84.



C. Subtypes of the A-frame form

Subtypes of the standard mountain type A-frame form can be understood as attempts to mitigate two of the most common critiques of the standard A-frame: the lack of natural light in interior spaces and difficulty in utilizing floor space in the angles between horizontals floors and the angled roof/wall plane. Variations in A-frame trusses include the arched or Gothic A-frame, the gambrel A-frame, and the flat-top A-frame. Variations in A-frame massing include the double A-frame, the A-frame with wings, the nested A-frame, and the staggered A-frame. When evaluating these variations, it is important that the A-frame be the dominant form and that the property retain the character-defining features outlined in Section 8.B. The different variations in the A-frame form are shown in Figure 98 and outlined below.

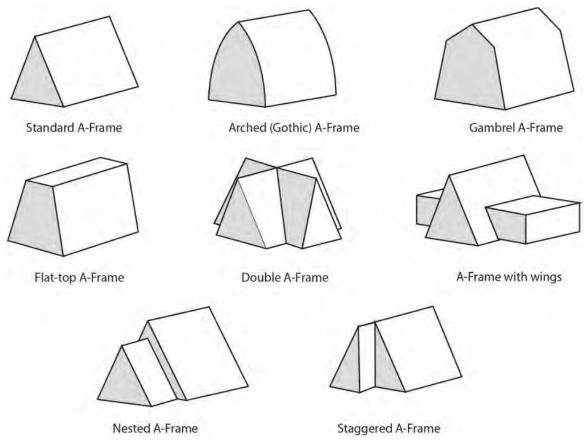


Figure 98. Illustrations of the various subtypes of A-frame forms.

(1) Arched (Gothic) A-frame

The arched, or Gothic, A-frame utilizes arched trusses in place of the straight-sided A-shaped trusses of the standard A-frame. The arched truss allows for increased interior space both in lofted floors and on the main floor, where the arched truss increases the angle at which the roof/wall meets the horizontal flooring. The arched A-frame maintains the standard gable ends and glazing configurations (see Figure 99).





Figure 99. Example of Arched (Gothic) A-frame at 83 Alpine Drive, Nederland. 199

(2) Gambrel roof A-frame

The gambrel roof A-frame utilizes gambrel roof trusses in place of the straight-sided A-shaped trusses of the standard A-frame. The gambrel truss allows for increased interior space both in lofted floors and on the main floor, where the gambrel truss increases the angle at which the roof/wall meets the horizontal flooring. The gambrel A-frame maintains the standard gable end and glazing configurations (see Figure 100).



Figure 100. Example of gambrel roof A-frame at 1960 Kohler Drive, Boulder. The large, non-A-frame additions to the rear of the property compromise the integrity of the gambrel roof A-frame portion.²⁰⁰



^{199 &}quot;Property Search."

²⁰⁰ "Property Search."

(3) Flat-top A-frame

The flat-top, or clipped, A-frame utilizes a flat-top roof truss in place of the straight-sided A-shaped trusses of the standard A-frame. The flat-top truss allows for increased interior space in lofted floors by eliminating unusable space in the roof peak. Flat-top A-frames maintain standard gable ends and glazing configurations (see Figure 101).



Figure 101. Example of a flat-top or clipped A-frame at 1900 Kohler Drive, Boulder.²⁰¹

(4) Double A-frame

The double A-frame is composed of two A-frame units set perpendicular relative to each other. These A-frame units may intersect in ways that create T-, L-, or cruciform-plan layouts. The double A-frames can use the standard, arched, gambrel, or flat-top roof. The A-frames maintain standard gable ends and glazing configurations. By combining two A-frame units, builders potentially double the amount of natural light entering the interior of the building (see Figure 102).



²⁰¹ "Property Search."



Figure 102. Example of a double A-frame at 12191 61st Street, Unincorporated. 202

(5) A-frame with wings (modified A-frame)

The A-frame with wings is a standard, arched, gambrel, or flat-top A-frame that also includes one or two wings. The wing or wings attach to the main A-frame building at side walls, meaning the A-frame portion of the building maintains its standard gable ends. Wings may have flat rooflines or front or side gable roofs. The addition of one or two wings to an A-frame allows for increased interior space and natural light (see Figures 103 and 104).





Figures 103 and 104. Two examples of A-frames with wings (modified A-frame). Left: Ronnie Lane, Unincorporated; note that the A-frame is not a double A-frame, as the roofline of the shorter wings does not extend to the ground.²⁰³ Right: 60 Timberline Road, Unincorporated.



²⁰² Photograph of 12191 61st Street, n.d., Boulder County Land Use Files.

²⁰³ "Property Search."

(6) Nested A-frame

The nested A-frame is composed of two A-frames of differing sizes, with the smaller A-frame nested into the large A-frame. Nested A-frames are often the result of renovations, where a larger A-frame was added to a smaller A-frame building. Nested A-frames may use standard, arched, gable, or flat-top roof trusses. Nested A-frames should maintain original gable ends and glazing configurations on full exterior gables (see Figure 105).



Figure 105. Example of a Nested A-frame at 200 Rockledge Circlet, Unincorporated.

(7) Staggered A-frame

The staggered A-frame features one gable where a portion of the A-frame truss extends beyond the main A-frame building. This results in one side of the gable end being projected and the other recessed. This staggered gable end allows for larger glazing configurations and the introduction of more natural light into the interior. The staggered gable end should be a minor feature, and the main part of the building (including the rear gable end) should be a symmetrical A-frame form (see Figures 106 and 107).





Figures 106 and 107. Example of a staggered A-frame on Peakview Road, Unincorporated. Left: The A-frame on the front wall is staggered, and slightly behind the first A-frame (as indicated by the red arrow).

Right: The same property as viewed from the rear wall, which maintains the simple A-frame form.²⁰⁴



²⁰⁴ "Property Search."

9. Evaluating and Determining Significance of A-frames in Boulder County

This section provides guidance for historians and home owners to identify, evaluate, and document A-frames in Boulder County for potential listing in the National/State Register of Historic Places, or as Boulder County landmarks. The first step involves historic research into the A-frame property or potential historic district, including whether any of the significant trends, builders, and methods described in the historic context of this document apply to the nominated property. Field survey is conducted to determine if the property displays any of the character-defining features or variations described in Section 8. The final step, as outlined in Section 9, is to determine whether the property meets the criteria of significance for the National Register, State Register, and/or Boulder County Landmark designation.

A. Results of COMPASS database search for A-frames

A file-search of the Office of Archaeology and Historic Preservation (OAHP) COMPASS database was completed to identify those A-frame resources already surveyed within the county. The search indicated four previously surveyed A-frames located within the county (5BL9282, 5BL9814, 5BL9817, 5BL9892). One of these, however, is not actually an A-frame by definition (5BL9814). All three of the legitimate A-frames were determined field or officially not eligible for listing in the National Register according to the terms used by OAHP for field survey determinations made by cultural resource surveyors and official determinations of eligibility made by OAHP staff.

Site No.	Resource Name	Address	Recorder	Determination (Year)
5BL9282	Wencel Farm, Braly Open Space	12191 N 61 st Street	Boulder County Parks & Open Space	Not Eligible- Field (2003)
5BL9814*	Rock Creek Summer Home Group Lot H Roberts	Off Ski Road	FS Arapaho & Roosevelt National Forest	Not Eligible- Officially (2008)
5BL9817	Rock Creek Summer Home Group Lot K Hicks	Off Rock Creek Road	FS Arapaho & Roosevelt National Forest	Not Eligible- Officially (2008)
5BL9892	Rock Inn	25 Chesebro Way	SWCA, Inc.	Not Eligible- Officially (2007)

^{*} Not an A-frame by definition

B. Evaluation

After completing the field survey and historic context, documented properties should be evaluated to determine if they meet the criteria for the National Register, State Register, and/or Boulder County Landmark designation. The evaluation methodology is based on the following:

- National Register Bulletins
 - How to Apply the National Register Criteria for Evaluation (https://www.nps.gov/nr/publications/bulletins/nrb15/)
 - How to Complete the National Register Registration Form (https://www.nps.gov/nr/publications/bulletins/nrb16a/)



- Colorado State Register of Historic Properties
 - How to Nominate a Property to the State Register
 (http://historycolorado.org/sites/default/files/files/OAHP/crforms_edumat/pdfs/1414b.pdf)
- Boulder County Historic Preservation Program
 - Article 15: Historic Preservation (https://assets.bouldercounty.org/wp-content/uploads/2017/02/land-use-code-article-15.pdf)
 - Landmark Designation Application Packet (https://assets.bouldercounty.org/wp-content/uploads/2017/02/h02histlandmarkpkt.pdf)

The significance of properties or potential historic districts should be determined relative to the historic context and evaluated against both the Boulder County Landmarks and National Register Criteria as outlined in the above documents.

C. National Register evaluation of individual properties

As detailed in the National Register Bulletin *How to Complete the National Register Registration Form*, individual properties and potential historic districts must be evaluated under at least one of four National Register criteria:

- Criterion A Properties evaluated under this criterion should demonstrate association with important historical events or trends that have made a significant contribution to broad trends of history.
- Criterion B Properties evaluated under this criterion should demonstrate association with the lives of historically significant individuals.
- *Criterion C* Properties evaluated under this criterion should demonstrate distinctive characteristics of a type, period, or method of construction, or represent the work of a master.
- Criterion D Properties evaluated under this criterion have yielded or hold the potential to yield
 important archeological information for either prehistory or history.

Individual properties are evaluated by analyzing the property history relative to the historic context and against the National Register Criteria. If an individual property conveys significance under the National Register Criteria and retains historic integrity (see below), the property is considered eligible for listing in the National Register. A statement of eligibility should be prepared that includes:

- National Register area of significance (i.e., *Criterion A*, *B*, *C*, and/or *D*)
- National Register level of significance (i.e., local, state, or national)
- Period of significance
- Narrative statement of significance



- Narrative statement of integrity
- Narrative description of historic boundary, including justification
- Map delineating property boundary

(1) Period of significance and areas of significance

The general period of significance for Boulder County A-frames is 1960-1985. This 25-year span marks the construction of the earliest A-frames in Boulder County in 1960 and the form's decline in the mid-1980s. The period of significance for an individual property will be dependent of the site's specific history. Under *Criterion A*, the period of significance should cover the range of years that the property was associated with a significant historic trend or event. Under *Criterion B*, the period of significance should reflect the date range the building is associated with a historically significant individual. Under *Criterion C*, the period of significance should be the date of construction and/or the date of any significant alterations that add to (not detract from) a building's architectural significance. Finally, under *Criterion D*, the period of significance should reflect the period for which the property may yield archeological information. It should be noted that properties less than 50 years of age are not eligible for the National Register except under *Criteria Consideration G* for properties of exceptional historic significance. The areas of significance most applicable to individual A-frames in Boulder County include Social History, Entertainment/Recreation, and Conservation (*Criterion A*), and Architecture and Landscape Architecture (*Criterion C*).

(a) Criterion A

Criterion A can be applied to properties that are associated with events or trends that have made a significant contribution to the broad historical patterns of the country, state, or region. A number of areas under *Criterion A*, as defined by the National Register Bulletin, may be applicable to A-frame properties. These include Social History, Entertainment/Recreation, and Conservation.

Social History

The National Register Bulletin defines social history as "the history of efforts to promote the welfare of society; the history of society and the lifeways of its social groups." The A-frame as a postwar vacation home represents a number of social history trends in the postwar U.S. Most notably, A-frame vacation homes represent the increase in wealth and leisure time many middle-class Americans experienced for the first time after World War II. This increased wealth and leisure time fueled the purchase and construction of vacation homes as middle-class Americans began to see vacation home ownership as an important component of the postwar "good life." Notions of the postwar good life were tied up with postwar consumer culture and postwar prosperity. In Boulder County these trends were particularly strong as the area developed its tourism and ski industries after the war. As more and more Americans sought vacation homes in new tourist areas like Boulder County, lumber and manufacturing industries met middle-class needs for affordable second homes with do-it-yourself kits and prefabricated A-frames. When considering the application of *Criterion A: Social History*, the following questions may assist in determining if a property or potential historic district possesses significance related to this theme:

²⁰⁵ National Park Service, *How to Complete the National Register Registration Form* (National Register Bulletin, 1997), 41.



- Does this A-frame represent the postwar trend of increased middle-class wealth and leisure time?
- Does this A-frame represent the accomplishment of the "good life" so important to postwar middle-class Americans?

Entertainment/Recreation

The National Register Bulletin defines entertainment/recreation as, "the development and practice of leisure activities for refreshment, diversion, amusement, or sport."²⁰⁶ In many areas, the A-frame as a postwar vacation home may have been part of the opening up of new recreational areas—in the Mountain West, in particular—characteristic of that period. When considering the application of *Criterion A: Entertainment/Recreation*, the following questions may assist in determining if a property possesses significance related to this theme:

- Does this A-frame represent the postwar trend of opening up new recreational areas, particularly in the Mountain West?
- Is this A-frame one of the first A-frames in a newly created recreational area?

Conservation

The National Register Bulletin defines conservation as, "the preservation, maintenance, and management of natural or manmade resources." The A-frame as a postwar vacation home has the potential to represent several themes under the category of conservation. The postwar era saw, for example, the proliferation of local state and national parks, especially in the U.S. West. The growth of these areas overlaps with Entertainment/Recreation, but have a greater emphasis on conservation of natural areas rather than their use for recreation and entertainment purposes. At the same time, the postwar period also saw a growth in the number of and participation in conservation associations like the Sierra Club. These associations not only increased the number of people using recreation areas and local, state, and national parks, but also built backcountry A-frame structures to house hikers and skiers far from resorts and vacation communities. When considering the application of *Criterion A: Conservation*, the following questions may assist in determining if a property or potential historic district possesses significance related to this theme:

- Was this A-frame part of the development of a local, state, or national park in the postwar period?
- Was this A-frame a backcountry shelter built or intended for use by conservation association members in the postwar period?

²⁰⁷ National Park Service, How to Complete the National Register Registration Form, 40.



²⁰⁶ National Park Service, How to Complete the National Register Registration Form, 40.

(b) Criterion B

As defined by the National Register Bulletin, *Criterion B* can be applied to properties associated with an individual or individuals who have made a significant historical contribution during the period of significance. The activities for which an individual is significant would have to have taken place in the A-frame. No individuals were identified in the historic context and, therefore, most A-frame vacation homes will not be significant under *Criterion B*. Exceptions to this might include A-frames where an artist created notable works of art or an architect designed significant buildings. Although the activities must be directly associated with the A-frame, the individual's achievements can be important at the local, state, or national level.

(c) Criterion C

As defined by the National Register Bulletin, *Criterion C* refers to properties where structures "embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values." ²⁰⁸ If determined significant under *Criterion C*, postwar A-frames will most likely fall under the category of Architecture or Landscape Architecture.

Architecture

The National Register Bulletin defines architecture as, "the practical art of designing and constructing buildings and structures to serve human needs." A-frames as a postwar vacation home can be divided into two types with different characteristics: architect-designed and non-architect-designed.

1) Architect-designed

Architect-designed A-frames are less common than A-frames not designed by an architect. These A-frames tend to exhibit a higher style and, if the architect is well-known, may be considered the "work of a master." These A-frames tend to be larger and often exhibit novel materials or methods of construction, which would also potentially make them significant under *Criterion C*.

2) Non-architect-designed

Most A-frames built as vacation homes during the postwar period were not designed by architects. To be considered under *Criterion C*, these A-frames should retain the character-defining features of the standard A-frame form as described in Section 8.B. Likewise, A-frames that are particularly good examples of the variations may also be significant under *Criterion C*. A-frames constructed from purchased kits and prefabricated models may be significant for their use of novel materials or method of construction. Because A-frames not designed by architects are fairly common, it is important to closely compare potentially significant properties to similar A-frames to determine if an A-frame embodies distinctive

²⁰⁹ National Park Service, How to Complete the National Register Registration Form, 40.



²⁰⁸ National Park Service, *How to Complete the National Register Registration Form*, 37.

characteristics or is a particularly good example of a standard form, variation, kit-built, or prefabricated A-frame.

When considering the application of *Criterion C: Architecture*, the following questions may assist in determining if a property possesses significance related to this theme:

- Is this A-frame designed by an architect? If so, does this A-frame embody unique
 materials or represent unique methods of construction? Is this A-frame the work of a
 master? Does it retain the character-defining features of a standard A-frame?
- If this A-frame is not designed by an architect, is it an outstanding representation of the character-defining features of a standard A-frame or its variations? Or, is this A-frame an outstanding representation of a kit-built or prefabricated A-frame?

Landscape Architecture

The National Register Bulletin defines landscape architecture as, "the practical art of designing or arranging the land for human use and enjoyment."²¹⁰ Individual A-frame properties may be significant under *Criterion C: Landscape Architecture* if they include special landscape elements like trees, pathways, lighting, vistas, and natural features designed in the postwar period. These properties may also be significant if the landscape design represents an important example or career stage of a particular landscape architect. When considering the application of *Criterion C: Landscape Architecture*, the following questions may assist in determining if a property possesses significance related to this theme:

- Does this A-frame vacation home represent unique landscape features typical of the postwar period?
- Does this A-frame vacation home serve as an important example of the work of a well-known landscape architect?

(d) Criterion D

As defined by the National Register Bulletin, *Criterion D* refers to properties that have yielded, or hold the potential to yield, information important to prehistory or history.²¹¹ While most A-frame vacation homes from the postwar period will not be significant under *Criterion D*, there are some instances where this criterion may be applicable. Historic deposits or trash heaps next to or in outhouse chambers, for example, may hold the potential to house discarded artifacts and foundations in unique or challenging settings may also have the potential to yield historical information.

²¹¹ National Park Service, How to Complete the National Register Registration Form, 37.



²¹⁰ National Park Service, How to Complete the National Register Registration Form, 41.

D. Colorado State Register evaluation of individual properties

The Colorado State Register of Historic Properties has established a set of nomination criteria that vary slightly from those of the National Register. Most notably, *Criterion D* differs under the State Register and a fifth criterion, *Criterion E*, has been added. The Colorado State Register nomination criteria are as follows:

- Criterion A The property is associated with events that have made a significant contribution history.
- Criterion B The property is connected with persons significant in history.
- *Criterion C* The property has distinctive characteristics of a type, period, method of construction or artisan.
- Criterion D The geographic importance of the property.
- Criterion E The property contains the possibility of important discoveries related to prehistory or history.

Criterion D under the State Register deals with the location of a property and its resulting geographic importance. Specifically, *Criterion D* can be applied to buildings or structures that are commonly recognized as visual landmarks due to their prominent location. Parks, fire look-out towers and cemeteries are properties that are likely to be evaluated under *Criterion D*. *Criterion E* under the state Register is essentially *Criterion D* under the National Register.²¹²

The document *How to Nominate a Property to the State Register* provides guidance for nominating a property to the Colorado State Register. The nomination process for the State Register is similar to the nomination process for the National Register. It should also be noted that Colorado properties listed in the National Register are automatically placed on the Colorado State Register. Properties may, however, be nominated to the Colorado State Register only.²¹³

E. Applying Boulder County Landmarks Criteria to a property

Boulder County and the Boulder County Historic Preservation Advisory Board has established their own criteria for landmark designation, as stipulated in Article 15 of the Boulder County Land Use Code, which reads as follows:



²¹² Colorado State Register of Historic Properties, "How to Nominate a Property to the State Register" (History Colorado, 2015), 7–8, http://historycolorado.org/sites/default/files/files/OAHP/crforms_edumat/pdfs/1414b.pdf.

²¹³ "Colorado State Register of Historic Properties," History Colorado, 2018, https://www.historycolorado.org/colorado-state-register-historic-properties.

15-501 Criteria for Landmark Designation

- A. In determining whether a structure, site, or district is appropriate for designation as a historic landmark, HPAB and the Board shall consider whether the landmark proposed for designation meets one or more of the following criteria:
 - 1. the character, interest, or value of the proposed landmark as part of the development, heritage, or cultural characteristics of the county;
 - 2. the proposed landmark as a location of a significant local, county, state, or national event:
 - 3. the identification of the proposed landmark with a person or persons significantly contributing to the local, county, state, or national history;
 - 4. the proposed landmark as an embodiment of the distinguishing characteristics of an architectural style valuable for the study of a period, type, method of construction, or the use of indigenous materials;
 - 5. the proposed landmark as identification of the work of an architect, landscape architect, or master builder whose work has influenced development in the county, state, or nation;
 - 6. the proposed landmark's archaeological significance;
 - the proposed landmark as an example of either architectural or structural innovation;
 and
 - 8. the relationship of the proposed landmark to other distinctive structures, districts, or sites which would also be determined to be of historic significance.²¹⁴

The Boulder County Historic Preservation Program Landmark Designation Application Packet provides guidance on how to apply the landmark criteria to a nominated property. This document provides more specifics for A-frame properties that might seek National or State Register listing or Boulder County landmark designation, including character-defining features, and recommended period of significance and areas of significance. As noted in the Boulder County landmark designation materials, the process for applying Boulder County landmark criteria is similar to that provided in *National Register Bulletin 16: Guidelines for Completing National Register of Historic Places Forms.*²¹⁵

A-frame vacation homes are likely to be evaluated under Boulder County's landmark designation criteria 4, 5, 7, and 8.

(1) Criterion 4

This criterion states that a proposed landmark property should be an embodiment of the distinguishing characteristics of an architectural style valuable for the study of a period, type, method of construction, or the use of indigenous materials. Vacation A-frame homes in Boulder County could be evaluated under this criterion if they are strong examples of the character-defining features of the standard A-frame or its variations. The character-defining features of A-frames are detailed in Section 8.

(2) Criterion 5

This criterion states that a proposed landmark property should be identified as the work of an architect, landscape architect, or master builder whose work has influenced development in the county, state, or nation. Architect-designed A-frames in Boulder County could be evaluated under this criterion. Boulder

²¹⁵ Boulder County Historic Preservation Program, "Boulder County Historic Preservation Program Landmark Designation Application Packet," November 15, 2005, 5, https://assets.bouldercounty.org/wp-content/uploads/2017/02/h02histlandmarkpkt.pdf.



²¹⁴ Boulder County Land Use, "Article 15, Historic Preservation," n.d., https://assets.bouldercounty.org/wp-content/uploads/2017/02/land-use-code-article-15.pdf.

County architect-designed A-frames are discussed in detail in Section 7. The work of Delta Vacation Homes may also be potentially evaluated under this criterion.

(3) Criterion 7

This criterion states that a proposed landmark should serve as an example of either architectural or structural innovation. Vacation A-frames in Boulder County could be evaluated under this criterion if they embody architectural or structural innovations. Most standard A-frames should not be evaluated under this criterion, but architect-designed A-frames may embody innovations and could fit this criterion. A-frame kits or prefabricated A-frames in Boulder County may also be evaluated under this criterion if they feature important architectural or structural innovations.

(4) Criterion 8

This criterion states that a proposed landmark should hold an important relationship to other distinctive structures, districts, or sites that would also be determined to be of historic significance. This criterion may be most applicable in the case of historic districts, where A-frame vacation homes are part of a larger collection of structures.

F. Integrity

Once an A-frame or potential A-frame district is determined to be significant, it is necessary to assess the integrity of the property to determine eligibility. The National Register Bulletin defines integrity as the ability of "a property to illustrate significant aspects of its past." As such, the evaluation of a property's integrity should be based on its ability to convey the theme and period of significance determined previously. Integrity is composed of seven different aspects, all of which should be assessed when evaluating integrity:

(1) Location

Location is the place where a historic property was constructed or where a historic event occurred. When combined with setting, the location of an A-frame vacation home is important to retain the sense of the postwar leisure lifestyle. Location is also important for architect-designed A-frames, which were likely planned with the specific location and landscape in mind.

(2) Design

Design is the combination of elements that create the form, plan, structure, style, and spatial organization of a property. Major alterations can affect the integrity of an A-frame vacation home's design. The majority of A-frame vacation homes were small and simple, and alterations to increase space are common. To maintain an integrity of design, an A-frame vacation home should retain most of its original character-defining features as described in Section 8.

(3) Setting

Setting is the physical environment of a property. Setting refers to the character of a place, not just the site itself. An A-frame vacation home will retain integrity of setting if the current surrounding environment is similar to the historic period of significance. Many A-frame vacation homes in Boulder County were

²¹⁶ National Park Service, How to Complete the National Register Registration Form, 4.



originally built on large wooded lots in rural settings. An A-frame's existing physical environment would have to remain intact or similar to the original in order to retain integrity of setting.

(4) Materials

Materials refers to the physical materials and elements that were combined in a particular pattern as part of the construction of a historic property. For an A-frame vacation home to maintain integrity of materials, exterior materials from the period of significance must remain unaltered. Materials generally found on standard A-frame vacation homes can be found in Section 8.

(5) Workmanship

Workmanship is the physical evidence of artisans and craftspeople as seen in a historic property. Postwar homebuilding was standardized and industrialized, so workmanship is unlikely to be a significant aspect of integrity, although A-frame vacation homes may evidence the work of do-it-yourselfers or local builders.

(6) Feeling

Feeling is a property's expression of aesthetic or historic sense. Taking together with location, setting, and association, feeling comes from the presence of physical features that convey a property's historic character. A-frame vacation homes should still feel like vacation homes in order to maintain integrity.

(7) Association

Association is the link between the historic property and the historic trend, person, or event being evaluated. The property should include physical elements that convey this association.

For an A-frame to maintain integrity, the property should retain integrity of several (and usually most) of these aspects. In particular, an A-frame should retain a number of its character-defining features, as discussed in Section 13.

(8) Alterations to individual A-frames

Alterations to A-frames are common, especially those intended to increase the amount of natural light entering the A-frame and those meant to increase the amount of usable space in corners and loft areas. While alterations diminish integrity, certain alterations to individual residences and potential districts may be present without compromising overall integrity. These alterations should be minor and not be detrimental to the character-defining characteristics of the A-frame form.

The following are alterations that do not compromise the integrity of individual A-frame properties:

- In-kind replacement of entrance doors
- Replacement windows that match original design, materials, size, and configuration
- Addition/replacement of porches in keeping with original design and materials
- Addition of features that are easily removed, such as shutters



- Addition of a small dormer that does not change massing or detract from A-frame shape
- Addition of ramps, especially at the rear of the house
- Alteration of the original landscape, if Landscape Architecture is not the area of significance

The following are alterations that do compromise the integrity of individual A-frame properties:

- Removal of house from its original setting
- Large-scale and/or multiple additions that substantially add to the mass of the structure, including large dormers added to roof/sidewall or the addition of major first floor living space that detracts from original form and massing
- Installation of modern siding materials, such as vinyl siding
- Alteration of windows that are inconsistent with original glazing pattern
- Reconfigured front entrances, including vestibules or large porches out of keeping with original type or that mask the A-frame form
- Altered roof lines, including the addition of large dormers
- Loss of character-defining features, including removal of original decorative features
- Addition of decorative features not consistent with original design or materials
- Addition of incompatible architectural elements that detract from original design, style. or form
- Enclosure of attached carport or garage and incorporation into interior living spaces, that change the massing or knee-wall height ratio.
- Addition of attached carport or garage not in keeping with original design

G. National Register evaluation of Historic Districts

Historic districts are evaluated much in the same way individual properties are evaluated. Historic districts should be evaluated relative to the historic context and against the National Register Criteria. Potential historic districts may include mountain-area subdivisions with a variety of tourist cabins and neighborhoods developed in the 1960s. Subdivisions or neighborhoods of exclusively A-frame properties are possible, but field survey revealed no such districts in Boulder County. Smaller groupings of A-frames, however, may constitute a potential district, especially under *Criterion C: Architecture*. The main difference between evaluating individual properties and historic districts is that the latter requires that the



potential district must be evaluated as a whole for historic significance and integrity. Properties within the potential district must then be determined as either contributing or non-contributing properties. To be considered contributing, properties must support the district's overall significance and should retain their overall form and massing and not detract from and the sense of time and place. A statement of eligibility for a potential historic district should include:

- National Register area of significance (i.e., *Criterion A*, *B*, *C*, and/or *D*)
- National Register level of significance (i.e., local, state, or national)
- Period of significance
- Narrative statement of significance
- Narrative statement of integrity
- List of contributing and noncontributing properties
- Narrative description of historic boundary, including justification
- Map delineating historic district boundary

(1) Period of significance and areas of significance

The general period of significance for Boulder County A-frames is 1960-1985. This 25-year span marks the construction of the earliest A-frames in Boulder County in 1960 and the form's decline in the mid-1980s. The period of significance for potential districts should be modified relative to its specific history. It should be noted, however, that properties less than 50 years of age are not eligible for the National Register of Historic Places except under *Criteria Consideration G* for properties of exceptional historic significance. The areas of significance most applicable to potential A-frame historic districts in Boulder County include Community Planning and Development (*Criterion A*), Architecture (*Criterion C*), and Landscape Architecture (*Criterion C*).

(a) Community Planning and Development

The National Register Bulletin defines community planning and development as, "the design or development of the physical structure of communities." The A-frame as a postwar vacation home may have originally been part of vacation communities, possibly attached to ski resorts or ski resort areas. Field survey revealed no exclusively planned A-frame resorts or communities. Mountain-area subdivisions and neighborhoods may include A-frames. When considering the application of *Criterion A: Community Planning and Development*, the following question may assist in determining if a potential historic district possesses significance related to this theme:

 Does this A-frame or potential A-frame district represent the planning and/or development of a vacation community?

²¹⁷ National Park Service, How to Complete the National Register Registration Form, 40.



(b) Architecture

The National Register Bulletin defines architecture as, "The practical art of designing and constructing buildings and structures to serve human needs." Postwar A-frames ranged in design from high-style, architect-designed A-frames usually used as a primary residence, to smaller, more simple designs used as vacation homes. Small groupings of A-frames that exhibit the work of a significant architect or possess high artistic value could constitute a potential district. Likewise, small groupings of simple A-frames could constitute a potential district if they retain the character-defining features of A-frame vacation homes as outlined in Section 8. Additionally, a small grouping of A-frames constructed from kits or prefabricated models may be significant for their use of novel materials or methods of construction. Because A-frames not designed by architects are fairly common, it is important to closely compare potentially significant districts to similar A-frames to determine if a collection of A-frames is a particularly good example of a standard form, variation, kit-built, or prefabricated A-frame. When considering the application of *Criterion C: Architecture*, the following questions may assist in determining if a potential historic district possesses significance related to this theme:

- Was this grouping of A-frames designed by an architect? If so, do these A-frames
 embody unique materials or represent unique methods of construction? Do these Aframes represent the work of a master?
- If not designed by an architect, is this grouping of A-frames an outstanding representation
 of the character-defining features of a standard A-frame or its variations? Or, is this
 grouping of A-frames an outstanding representation of kit-built or prefabricated A-frames?

(c) Landscape Architecture

The National Register Bulletin defines landscape architecture as, "the practical art of designing or arranging the land for human use and enjoyment." Potential A-frame districts may be significant under *Criterion C: Landscape Architecture*. Potential districts like ski resorts and vacation communities may be significant if they maintain a high concentration of A-frames and special landscape elements like trees, pathways, lighting, vistas, and natural features designed in the postwar period. These properties may also be significant if the landscape design represents an important example or career stage of a particular landscape architect. When considering the application of *Criterion C: Landscape Architecture*, the following questions may assist in determining if a potential district possesses significance related to this theme:

- Does this A-frame vacation resort, or community represent unique landscape features typical of the postwar period?
- Does this A-frame resort, or community serve as an important example of the work of a well-known landscape architect?

²¹⁹ National Park Service, How to Complete the National Register Registration Form, 41.



²¹⁸ National Park Service, "How to Complete the National Register Registration Form" (National Register Bulletin, 1997), 40.

(2) Alterations to potential historic districts

The discussion of potential historic districts in this report refers to districts of historic A-frames. Districts of vacation cabins, for example, where A-frames are contributing structures are certainly possible, but are beyond the scope of this study.

The following alterations do not compromise the integrity of potential A-frame historic districts:

- Exterior alterations to a small number of properties within district, including siding and minor alterations
- Subdivision of a small number of lots within the district
- Small amount of infill construction
- Loss of original plant materials, especially if original landscape design remains
- Maturation of trees and plants
- Loss of small number of features within a historic district, including ancillary buildings, roads, or parks
- Maintenance of streets, paths, and sidewalks, including in-kind replacement
- Small number of noncontributing properties

The following alterations do compromise the integrity of potential A-frame historic districts:

- Changes to size of housing lots through division or consolidation outside period of significance
- Multiple infill properties that detract from size and scale of buildings within a district
- Loss of entire sections of planned development
- Cumulative alterations and additions to a large number of houses
- Alteration to internal road network or access roads resulting in changed circulation patterns
- Redesign of park landscape and circulation features
- Widespread changes in land use



H. Defining historic boundaries

Historic boundaries for individual properties and historic districts should be established following the guidelines established in the National Register Bulletin, *Defining Boundaries for National Register Properties*, the State Register document, *How to Nominate a Property to the State Register*, or Boulder County's Landmark Designation Application Packet, Appendix F, Guidelines for Boundary Identification These boundaries are typically legal parcel boundaries and include all natural and manmade features, buildings, structures, and objects that are included on the parcels in question.

I. Documentation that should be provided for A-frame nominations

In addition to the A-frame historic context and eligibility evaluation, additional documentation should be gathered as the final step in preparing a property or district nomination. The requirements for this documentation are similar for the National Register, State Register, and Boulder County Landmark designation. Small differences in the requirements do exist, however, and preparers should consult the bulletins and publications in Section 9.B.

In general, the following documentation will be required for National Register, State Register, and Boulder County Landmark nominations:

- Property name
- Property location
- Property classification
- Function or use
- Description
- Statement of significance
- Bibliographical reference
- · Geographical data and photos
- Property owner and consent
- · Form preparer

For potential A-frame historic districts, the following should also be included:

 Discussion of architectural styles and forms, construction dates, materials, setbacks, distinguishing features, and alterations



- Circulation patterns
- Green spaces and landscape architecture features
- Associated features (e.g., parks, schools, churches, and community buildings)
- Photographs
- List of contributing and noncontributing properties

It should be noted that nominations for the Colorado State Register, which can be prepared by any individual or organization, also require documentation of property owner consent. This includes both private and public property owners. Additionally, nominations for Boulder County Landmark designation may only be made by property owners, the Historic Preservation Advisory Board (HPAB), or the Board of County Commissioners. Other parties may request that the Historic Resource Subcommittee review a property for possible nomination by HPAB.

²²¹ Boulder County Historic Preservation Program, "Boulder County Historic Preservation Program Landmark Designation Application Packet," 5–9.



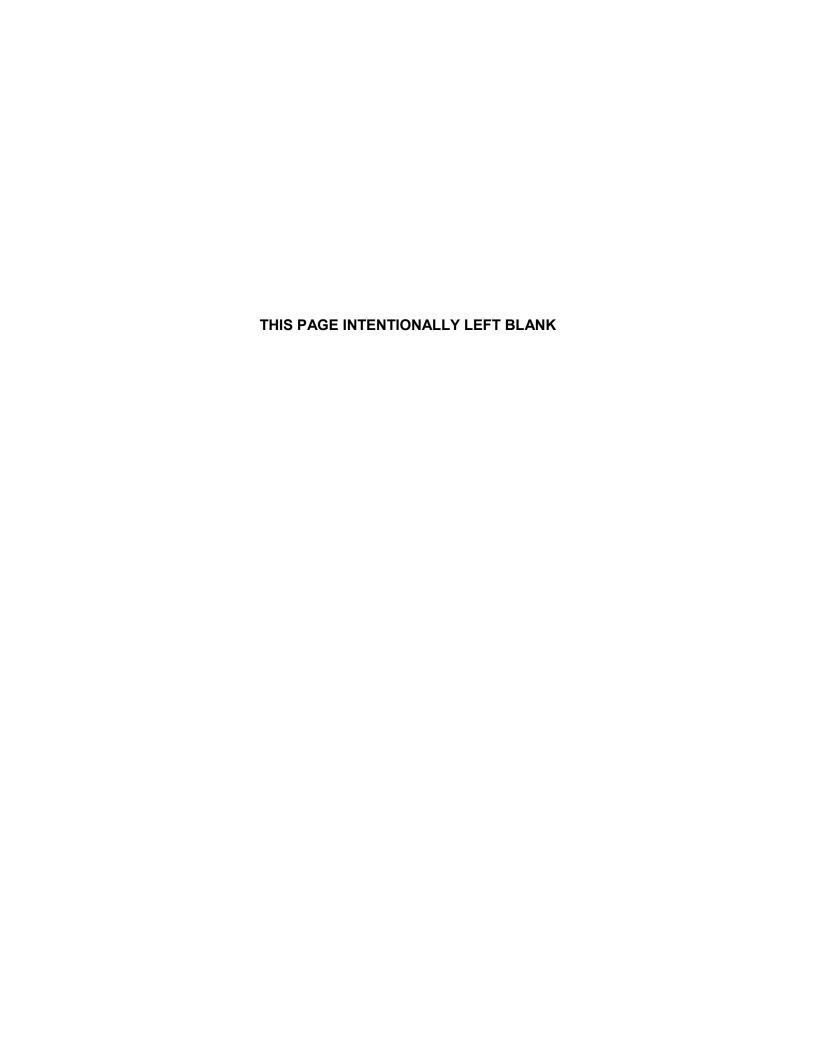
²²⁰ Colorado State Register of Historic Properties, "How to Nominate a Property to the State Register," 1.

10. Recommendations

As the first study of the A-frame type within Boulder County, this document provides a valuable context for the resource type as well as guidance regarding how to apply eligibility criteria to determine the potential significance of A-frame buildings within the County. This context and study, however, is the first step in exploring the preservation of this unique building type. Future research, recordation and survey recommendations include the following:

- A second phase that includes the individual survey of specific A-frames should be considered. The prioritization of this survey effort needs to be determined; however, those properties with owners who have expressed an interest in having their building evaluated could be given higher priority as owner consent and cooperation could facilitate survey efforts. In addition, priority could be given to A-frames identified in assessor records and existing photographs as retaining architectural integrity. Future larger-scale survey efforts could utilize another grant to fund the individual survey of A-frames in the county.
- Individual landmark listing should be explored for the few remaining, intact, architect-designed examples in the county. They tend to be located on prime land near Boulder and have been subject to recent alterations and demolitions. Because of their potential for redevelopment, these properties should also be given a high priority during the second, individual evaluation phase of the project. As a type of architecture dominated by kits and do-it-yourself plans, the early efforts by architects in Boulder County to work with this distinctive form and adapt it to the landscape should be documented and preserved. In addition, exemplary, intact examples of kit-produced homes, particularly those built by Delta Vacation Homes because of the company's prolific work in the Rocky Mountain region and intrinsic ties to Boulder County, should also be explored for individual landmark designation.
- The county-owned A-frame at 12191 61st Street is also an excellent example of a double A-frame, with rustic styling that appears relatively unaltered. Additional research on this property and ties to a potential architect or builder should be completed and considered for landmark designation.
- Various geographic concentrations should be examined further to determine whether the potential
 for a possible historic district of A-frames exists. The potential historic district may not be comprised
 of just A-frame buildings, but of the postwar vacation cabin, with the A-frame serving as a type
 within that theme. Subdivisions platted in the postwar period, as well as unincorporated areas builtup during that timeframe, offer the possibility to possess these potential historic districts.
- The recent past is an area that requires greater attention not only in the built environment, but in the archival record as well. As the context and survey report of *Modern Architectural Structures in Boulder* noted, there is a dearth of material and indexing of materials from this era in the local archive. There is little information on the many architects working in Boulder during this era, beyond a few of the most notable. This report also noted that building permits should be modified, if possible, to include information on the architect. Many of the permits pulled for this project either did not include any information, or listed architects, builders, and contractors in the same field, making it difficult to ascertain the role of those listed.





Bibliography

- "1905 Kohler Dr, Boulder, CO 80305 | Zillow." Accessed December 1, 2017. https://www.zillow.com/homedetails/1905-Kohler-Dr-Boulder-CO-80305/13181588 zpid/.
- "A' Frame." Sunset, June 1963.
- "A-Frame." Washington Department of Archaeology and Historic Preservation, n.d.
- "A-Frame Dog House." Sunset, January 1967.
- "A-Frame Mountain Cabin Kits." Boulder Daily Camera, February 22, 1964.
- Anstey, Mary Therese, and Adam Thomas. "Fourmile Canyon Historical and Architectural Survey, 2012-2013." prepared for Boulder County Parks and Open Space, June 2013.
- ArildV. Feskekôrka, Gothenburg, Sweden, Victor von Gegerfelt. September 24, 2011. wikicommons. https://commons.wikimedia.org/wiki/File:Feskek%C3%B4rka_september_2011.jpg.
- Aron, Cindy S. *Working at Play: A History of Vacations in the United States*. New York: Oxford University Press, 1999.
- Basic-Bilt. "A-Frame Vacation Home Basic-Bilt Brochure," n.d. Cathy Faughnan Personal Collection.
- Beal, Dirk. phone interview with ARCH Professionals, LLC., November 1, 2017.
- Beavers, Jack. *Methodist Student Center*. n.d. Virtual Photograph Collection, Jackson Beavers Design drawings, Call #999-17-5 Photo. Boulder Carnegie Library.
- Bloomquist, Susan. "208 Wild Tiger Road Exterior," n.d. Susan Bloomquist Personal Collection.
- Boulder County Historic Preservation Program. "Boulder County Historic Preservation Program Landmark Designation Application Packet," November 15, 2005. https://assets.bouldercounty.org/wp-content/uploads/2017/02/h02histlandmarkpkt.pdf.
- Boulder County Land Use. "Article 15, Historic Preservation," n.d. https://assets.bouldercounty.org/wp-content/uploads/2017/02/land-use-code-article-15.pdf.
- "Brown Brokaw Bowen | AspenModern." Accessed November 17, 2017. http://www.aspenmod.com/architects/brown-brokaw-bowen/.
- Bryant, Jennifer, and Carrie Schomig. "Historic Context and Survey of Post World War II Residential Architecture Boulder, Colorado." prepared for the City of Boulder, Colorado, April 2010.
- Buchman, Barbara. *Fairview High School*. 1988. Boulder Carnegie Documents Room, Call # 703-1-25 Photo. Boulder Carnegie Library.
- Buggeln, Gretchen. *The Suburban Church: Modernism and Community in Postwar America*. Minneapolis: University of Minnesota Press, 2015.



"Build Your 'A-Frame' Vacation Cottage with Homasote." <i>Seatle Times</i> , September 12, 1965.
Bull, Ellen. "Boulder's Cliff-Hanging Houses." Denver Post Contemporary Magazine, May 10, 1964.
Burr, Caroline. "A-Frame Architecture in Boulder County Survey," October 16, 2017.
"Carefree Cabin Is Adaptable for Long-Term, Added Planning." Boulder Daily Camera, June 16, 1962.
Chronic, Betty M. "Eldorado Springs Resort Historical Context 1904-2004," July 7, 2005.
Clapper, Jamie, and Tony King. "Rock Creek SHG Lot K Hicks (5BL9817)," July 20, 2004. Architectural Inventory Form. Colorado Office of Archaeology and Historic Preservation.
Cobb, Lew. "Letter Requesting Tourism Promotion," n.d. Tourists, Printed Materials, 1936-1969 folder-BHS 328 B219 F01. Boulder Carnegie Library.
Colorado Tourism Council. "Tourism White Papers, Number 1," August 1, 1976. Tourists, Printed Materials, 1970-1979, BHS 328 B219 F02. Boulder Carnegie Library.
——. "Tourism White Papers, Number 2," August 9, 1976. Tourists, Printed Materials, 1970-1979, BHS 328 B219 F02. Boulder Carnegie Library.
———. "Tourism White Papers, Number 4," September 10, 1976. Tourists, Printed Materials, 1970-1979, BHS 328 B219 F02. Boulder Carnegie Library.
Colorado State Advertising & Publicity Department. "Free Reproduction Authorized by Colorado State Advertising & Publicity Dept.," 1952. Tourists, Printed Materials, 1936-1939- BHS 328B219 F01. Boulder Carnegie Library.
Cooperative Extension State of North Dakota. "36'-0" 'A' Frame Cabin," 1963. Building Plans. North Dakota State University Extension. www.ag.ndsu.edu/extension-aben/buildingplans/housing.
Delta Vacation Homes. "1963 Price Sheet," 1963. Steve Stoecker personal collection.
——. "1972 Price List," 1972. Steve Stoecker personal collection.
——. "Delta Imagineered Vacation Homes 1964 Brochure," 1964. S.
——. "Delta Presents," 1961. Steve Stoecker personal collection.
——. "Delta Vacation Homes 1982 Brochure," 1982. Steve Stoecker personal collection.
Dilsaver, Lary M. America's National Park System: The Critical Documents. Rowman & Littlefield, 2016.
"Eldora Mountain, Colorado, History International Skiing History Association." Accessed December 7, 2017. https://www.skiinghistory.org/history/eldora-mountain-colorado-history.



"Exclusive Alpine and Lake Shore Sites." Boulder Daily Camera, September 20, 1964.

- Fasick, Jessica. Photograph of 2935 3rd Street. November 2017. Boulder County Land Use Files.
- Faughnan, Cathy. "833 Hemlock Drive, Front Exterior," n.d. Cathy Faughnan Personal Collection.
- ——. "833 Hemlock Drive, Interior View from Loft," n.d. Cathy Faughnan Personal Collection.
- ——. "A-Frame," November 30, 2012.
- "FUMC Celebrates 155th Anniversary on Thursday, 11/20, and in Worship on Sunday 11/23." First United Methodist Church Boulder (blog), November 18, 2014. http://fumcboulder.org/2014/11/17/fumccelebrates-155th-anniversary-on-thursday-1120-and-in-worship-on-sunday-1123/.
- Gay, Frank. "Bill Stasick King of the Mountain." Sunday Camera Magazine. October 14, 1984.
- "Grand Opening." Boulder Daily Camera, May 12, 1960.
- "Grand Opening, The International House of Pancakes." *Boulder Daily Camera Focus Magazine*, May 22, 1966.
- Haselbush, Willard. "Facilities in High Country Expanded for Skiing Fans." *Denver Post*, September 8, 1963.
- "Historic Context Study on A-Frame Architecture in Boulder County." *Boulder County* (blog). Accessed November 17, 2017. https://www.bouldercounty.org/property-and-land/land-use/historic-preservation/a-frame-architecture-study/.
- "Hobart D. Wagener's Obituary on Denver Post." Denver Post. Accessed November 23, 2017. http://www.legacy.com/obituaries/denverpost/obituary.aspx?n=hobart-d-wagener&pid=15374827.
- "Hogsett Lumber." Boulder Daily Camera Focus Magazine, June 27, 1965.
- Ingold, Frederick T. "Mountain View Methodist." *Boulder Daily Camera Focus Magazine*, February 28, 1965.
- "Invitation to Fun." Boulder Daily Camera Vacation Edition, July 2, 1956.
- Jakle, John A., and Keith A. Sculle. *Motoring: The Highway Experience in America*. University of Georgia Press, 2008.
- Kaiser, Harvey H. Great Camps of the Adirondacks. Boston: David R. Godine, 1982.
- Kathleen Corbett, PhD, Corbett Architectural Historians with Dianna Litvak, Mead & Hunt, Inc. "Survey Report Discover Denver Phase #2, Area 1: Virginia Village," 2017.
- "Lake Eldora Resort Ski Area in Boulder County Expanding." Denver Post, August 18, 1963.
- "Leasing Co. Has Ordered Liquidation of 30 Cars." Boulder Daily Camera, January 3, 1964.
- Lert, Wolfgang, and Morten Lund. "Bill Klein in Donner Pass." *Skiing Heritage* 11, no. 2 (June 1999): 14–23.



- "Magnificent Alpine and Lake View." Boulder Daily Camera Focus Magazine, July 19, 1964.
- May, Elain Tyler. Homeward Bound: American Families in the Cold War. New York: Basic Books, 2008.
- McAlester, Virginia Savage. A Field Guide to American Houses. New York: Alfred A. Knopf, 2013.
- Meyerriecks, Bill. "Time for Greenhouse Is Right Now." Boulder Daily Camera, March 28, 1964.
- "Mountain View Methodist Church Begins Services in New Building." *Boulder Daily Camera*, January 1960.
- Nabokov, Peter, and Robert Easton. *Native American Architecture*. New York: Oxford University Press, 1989.
- National Park Service. "How to Complete the National Register Registration Form." National Register Bulletin, 1997.
- "New Concrete Home a 'First." Denver Post, October 2, 1967.
- Norman, Cathleen. "Historic Contexts Report 1999-2002 Cultural Resources Survey of Unincorporated Jefferson County." Preservation Publishing, Lakewood, CO: for Jefferson County Historical Commission, Jefferson County Archives and Records Management, Jefferson County Planning and Zoning Division, December 30, 2002.
- Paglia, Michael, Leonard Segal, and Diane Wray. "Modern Architectural Structures in Boulder: 1947-1977." Context and Survey Report. Prepared for the City of Boulder Planning Department and the Boulder Landmarks Preservation Advisory Board, June 1, 2000.
- Palmer, Wallace. "Exterior of 594 Wild Horse Circle," n.d. 594 Wild Horse Circle File. Boulder County Land Use.
- ——. "Interior of 594 Wild Horse Circle," n.d. 594 Wild Horse Circle File. Boulder County Land Use.
- Philpott, William. *Vacationland: Tourism and Environment in the Colorado High Country*. Seattle, WA: University of Washington Pres, 2013.
- Photograph of 213 High View Drive. n.d. Boulder County Land Use Files.
- Photograph of 12191 61st Street. n.d. Boulder County Land Use Files.
- Photograph of 12738 Sheramdi Street. n.d. Boulder County Land Use Files.
- "Property Search." Accessed December 1, 2017. http://maps.boco.solutions/propertysearch/.
- Randl, Chad. A-Frame. New York: Princeton Architectural Press, 2004.
- R.C. Cramer Lumber Co. "New Low Prices Now for Spring on Lumber and Building Materials." *The Pocono Record*, April 17, 1962.
- "Red-E-Cut-Logs 'A' Frame." Sunset, June 1963.



- Rowley, William D. Reclamation: Managing Water in the West. Denver: Bureau of Reclamation, 2006.
- RRC Associates, Inc. "Boulder Convention and Visitors Bureau 2013 Economic Impact of Tourism." prepared for Boulder Convention and Visitors Bureau, March 2014.
- "Rudolph M. Schindler." MAK Center for Art and Architecture, Los Angeles, 2017. http://makcenter.org/rm-schindler-bio/.
- Rugh, Susan Sessions. *Are We There Yet?: The Golden Age of American Family Vacations*. Lawrence: University Press of Kansas, 2008.
- Schultze, Steven. "The Rockies Are an Old Tourist Lure." Boulder Daily Camera, January 25, 1976.
- Simon Webb. March 4, 2006. wikicommons. commons.wikimedia.org/wiki/File:Cruck_framing.jpg.
- "Sound Investment in Leisure Family Living." Boulder Daily Camera, June 15, 1961.
- Stern, Phillip. "Re: Your A-Frame!," November 24, 2017.
- Stoecker, L.R., April 1, 1973. Steve Stoecker personal collection.
- Stoecker, Steve. "Delta History," November 14, 2017.
- ——. interview with ARCH Professionals, LLC., October 12, 2017.
- "Sunshine Canyon A-Frames." M. Gerwing Architects. Accessed November 17, 2017. http://mgerwingarch.com/m-gerwing/2011/05/13/sunshine-canyon-a-frames.
- "Take to Mountains Automobile Club Advises Tourists." *Boulder Daily Camera Vacation Edition*, July 2, 1956.
- "The Cabin Program National Forest Homeowners." Accessed February 15, 2018.

 http://www.nationalforesthomeowners.org/default.asp?page=Cabin_Program&DGPCrPg=1&DGPCrSrt=7D.
- The Center of Preservation Research at the University of Colorado Denver. *Krisana Park Pattern Book: Ideas for a Midcentury Modern Neighborhood, Denver, Colorado*. Colorado University Center of Preservation Research, 2017.
- "Thousands Attracted to Boulder Each Year." Boulder Daily Camera Focus Magazine, August 30, 1964.
- "Tourism in Colo. Up 15%," n.d. Tourists, Printed Materials, 1970-1979, BHS 328 B219 F02. Boulder Carnegie Library Newspaper Clippings.
- "Two Home Trend for Families Is Increasing." Boulder Daily Camera, January 30, 1960.
- Weiss, Werner. "Der Wienerschnitzel, 105 E. El Camino Real at 1st St., Tustin, Calif.," 1974. Werner Weiss Collection, Acc#2013.6. Orange County Archives.
- "Welcome to Calvary Chapel Nederland." Accessed November 23, 2017. http://calvarychapelnederland.org/history.html.



Bibliography

Wendt, Charles. "Summer Resorts of Boulder County." *Boulder Daily Camera Focus Magazine*, October 18, 1964.

Year 'Round Vacation Home Plans: 50 Exciting Designs to Build. Master Plan Publications, 1969.

