In order to preserve the natural beauty of Beaver Creek and its setting, to maintain Beaver Creek as a pleasant and desirable environment, to establish and preserve a harmonious design for the community, and to protect and promote the value of property, exterior design, landscaping and use of all new development and additions, changes or alterations to existing use, landscaping and exterior design and development shall be subject to design review.

In accordance with the Amended and Restated General Declaration for Beaver Creek, Eagle County, Colorado, this document sets forth the rules and regulations that shall state the general design theme of all projects in Beaver Creek, specific design requirements, and the general construction procedures that will or will not be allowed in Beaver Creek.

This document was adopted by the Beaver Creek Design Review Board on December 3, 1981 and may be amended from time to time by the Beaver Creek Design Review Board. Buyer should check with the Beaver Creek Design Review Board for amendments.

Jack Zehren, A.I.A.
Chairman,
Beaver Creek Design Review Board

Design Regulations

The Village
and other Commercial, Service, Recreational, and Multi-Family Residential Areas

Index

Index (continued)

Index (continued)

Design Theme

The overriding design philosophy of Beaver Creek is to establish a remote village with its own identity, an imaginable place, complementing rather than competing with the natural landscape.

The architectural theme for Beaver Creek has been directed at establishing a compatability between buildings and the natural environment, fulfilling the expectations of visitors as a retreat to the mountains, respecting the historic precedent of mountain buildings in both Colorado and Europe, and utilizing energy conservation and solar energy applications.

As seen from a distance, the Village should be understated and uncomplicated, made up of simple forms and consistent roof lines. In contrast to this, the central pedestrian area of the Village should have an exciting vitality and broad individual expression.

In order to more clearly interpret the design theme for Beaver Creek architecture, three levels of perception, e.g. ways in which the community will be observed, have been identified, each with its own set of considerations.

Design Theme

Perception Level I - The Village within the Landscape

At a distance the Village is seen either from the mountain looking down, or from the entry road upon arrival. Due to vegetation masses, as well as site lines created by the terrain of the area, the roofs will become the dominant element at this level of perception. At this scale, the Village should be composed of simple understated forms with an overall consistency of materials and color. Roofs shall be simple hip and gable forms. Variety should be a response to changes in topography and exterior spaces.

Materials and colors shall be relatively subdued with nonreflective surfaces. The golf course from below and the ski slopes from above will tend to set the Village in the natural and open landscape. Aspen and spruce forests on the east and west will tend to fuse the edges of the Village into the landscape.

The buildings from the south should open to the sun and from the north be closed to cold exposures. This contrast is similar to the extreme variation of the natural landscape between north and south facing mountain slope environments.

Residential areas should blend structures and landscape, respecting natural landforms and existing vegetation. The primary focus should be the Village with an intensity of structures contrasting with the low density and undeveloped areas surrounding it.

Design Theme

Perception Level II - Building and Public Spaces

The second level of perception of the Beaver Creek Village will occur within the streets and public spaces of the project. At this level of perception the exterior walls become the dominant element, establishing the overall scale, and defining the public spaces and pedestrian circulation routes within the Village. It is important that the sequence of public streets, walls and plazas be continuous within the Village, enhanced by minor angular changes with an avoidance of rigid 90° patterns. The subtle changes within wall and street alignments will create interesting streets and walls with constantly changing frontages and points of focus.

The visual expression of the walls shall be predominantly mass at the pedestrian scale, punctuated by window and door openings. On upper levels, openings shall be not more than 20% of the exposed wall area on the north, west, and east, with unlimited opening to the south responding to sun exposure and mountain views. Window and door openings should be placed in a casual or random pattern avoiding rigid symmetry, repetition, and formal patterns.

In order to achieve continuity within the landscape and within the Village itself, it is important to have building-to-building and building-to-public open space connections. These can take the form of overhead bridges, retaining walls, terraces, and private courtyards leading to public plazas and malls.

Design Theme

Perception Level II - Building and Public Spaces (continued)

Buildings should express the structure in a rational manner with elements such as massive bearing walls and timber framing. Design should avoid visually contradicting structural relationships.

The use of materials becomes increasingly important at this level of perception, and materials should respond to the following uses:

- Framing
  Heavy timber, wood trusses, and connection details are encouraged as exposed framing elements. These become especially important in establishing interesting interior volumes.
- Nonstructural Surface Materials
  Upper level wall surfaces which appear to be non-loadbearing can be sheathed in wood siding, which should be left naturally weathered or bleached to complement other natural materials such as native rock. Stucco shall not be used as in-fill material, but rather as an expression of mass. Roofs should be made up of unit pieces of clay tile.
- Mass
  Generally the lower levels of the buildings near the pedestrian areas should be expressive of mass and substantial structural strength. Materials such as rock or plaster shall have irregular surfaces without modular patterns, precision lines, or perfectly flat surfaces. The massive portions of buildings shall have an expression of depth, substance and strength, nc mere surface coverings. Windows and door reveals should have substantial depths, allowing room for interior nooks

Design Theme

Perception Level II - Building and Public Spaces (continued)

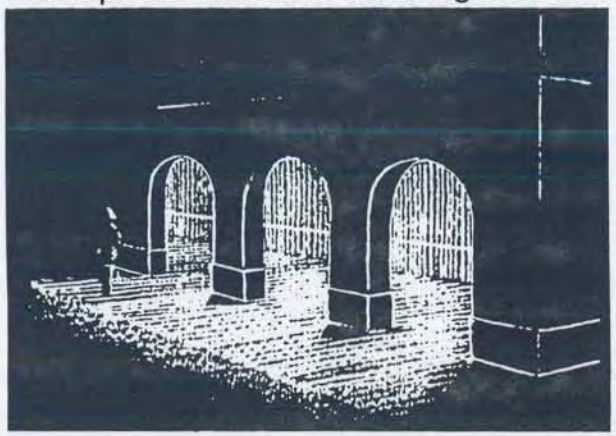
Perception Level III - Building and Landscape Details

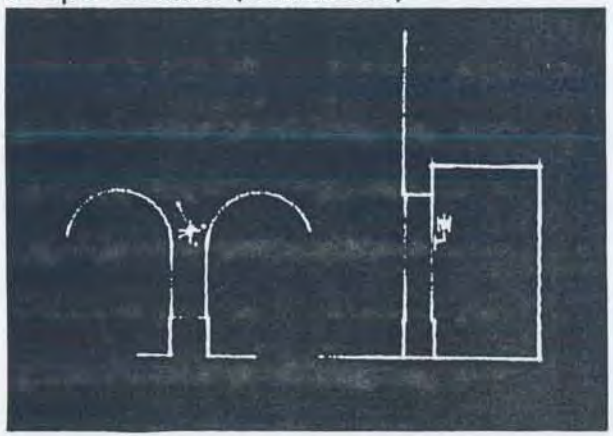
and recesses within the walls. Masonry wall colors should be generally warm off-white tones, complementing naturally weathered wood and rock colors.

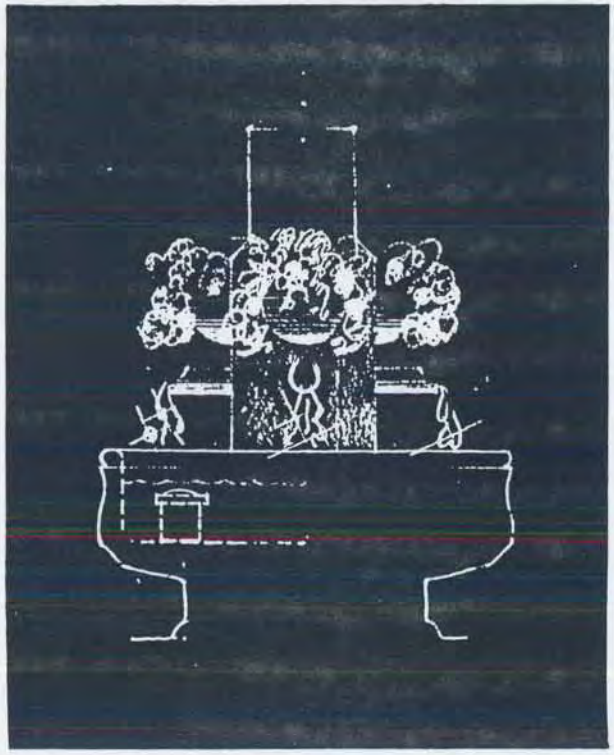
- Details
  Elements such as window and door openings, balconies, trim, graphics, signs, street furniture, water, paving patterns, surface textures and color provide the third level of perception within the Village and offer the opportunity for maximum interest and individual expression. It is intended that maximum individual expression be allowed in these details to achieve a richness and vitality within the Village. Details and trim should avoid refined, highly technical finishes and, where possible, should represent handcrafted quality, especially where they have high exposure to pedestrians.
- Color
  The use of color is very important to the visual richness of the Village. While major wall surfaces should be a neutral backdrop of off-white tones, smaller scale elements such as doors, window trim, signs, soffits, and recessed wall areas should introduce a strong palette of color to the Village.
- Artwork
  The cultural vitality of the area should be expressed through artwork within the Village buildings, streets, and promenades. Sculpture, fountains, ironwork, and wood carving should become integral to the design of buildings and public spaces.

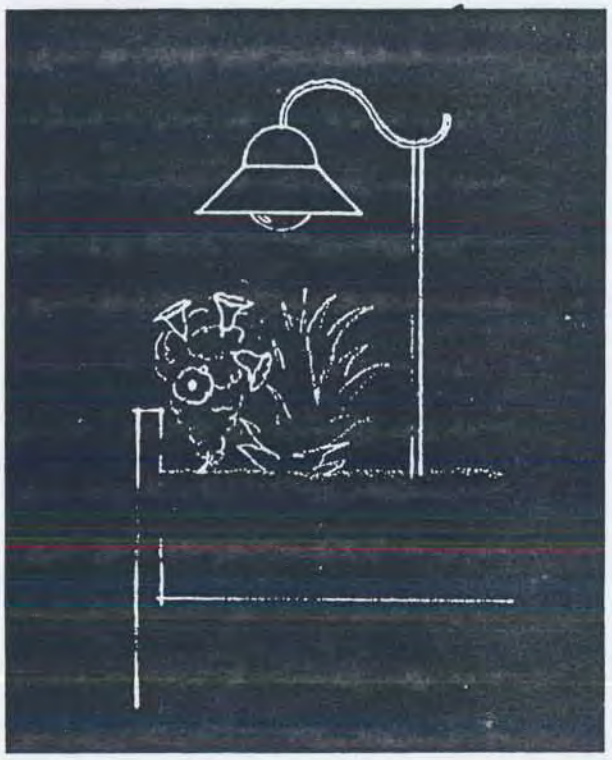
Design Theme

Perception Level III - Building and Landscape Details (continued)









- Lighting
  Lighting establishes the mood and awareness of the Village scene during the active evening hours and is therefore critical to the aesthetic and commercial success of the Village. Overall ambient lighting of public streets and spaces should be understated with minimum glare from fixtures. This subdued background light provides the context for the highlighting of architectural features, artwork, and planting. Shop fronts should include window signage lighting which also provide indirect lighting of adjacent pedestrian areas. Light sources should generally be concealed unless used as decorative features. All major projects should engage a professional lighting consultant and their design should be coordinated with adjacent properties.

Governing Regulations

All developments shall conform with:

- This manual;
- Amended and Restated General Declaration for Beaver Creek;
- Supplemental Declaration of Land Use Restrictions;
- 1979 Uniform Building Code;
- 1979 Uniform Mechanical Code;
- 1979 Uniform Plumbing Code;
- 1981 Life Safety Code;
- 1979 Uniform Fire Code;
- 1979 The State of Colorado Energy Conservation Standards;
- 1981 National Electrical Code;
- Manual for Telecommunications System Regulations;
- Fire and Life Safety Rules and Regulations.

If any of the above documents are updated or changed in any way, the most current document will be applicable.

All development shall be designed for the following:

- 100 PSF Snow Load;
- 35 PSF Wind Load;
- Approximately 9,500-10,000 Heating Degree Days.

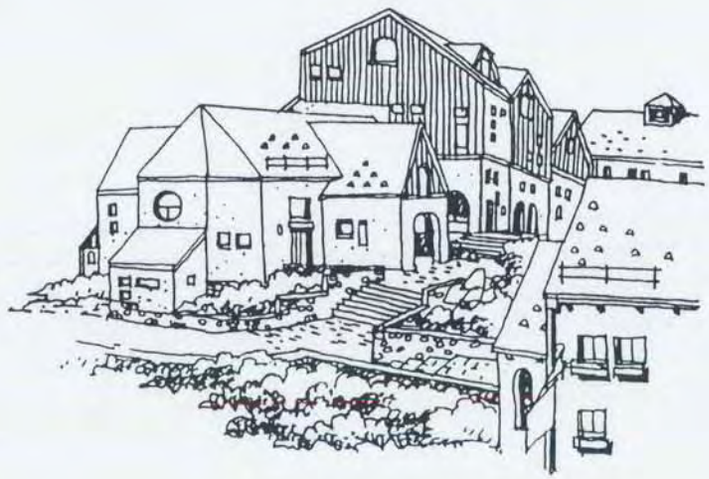
All surveys within Beaver Creek are based on the State Plain Coordinate System. Please check with the Beaver Creek Development Company for vertical and horizontal control.

Definitions

Condominium	A condominium within Beaver Creek is defined as any group of rooms created as a fee simple estate in a defined air space within a multi-unit property. The condominium shall have not more than one kitchen, and all rooms shall be interconnected through doors or foyers. Within a condominium, any bedrooms that connect by doorway directly into the living room, dining room, kitchen or entry foyer are considered part of a single dwelling unit. These rooms may "lockoff" from the remainder of the suite, with direct access to a corridor or outside entry, but would still be considered part of the condominium dwelling unit. A condominium shall have no more than three lockoffs and one kitchen per unit.
Standard Hotel Room	A room within a hotel used primarily as a bedroom. A standard hotel room may include a bathroom, closet and balcony. Up to three standard hotel rooms may be joined by interior connecting doors into one dwelling unit. Unconnected hotel rooms shall be counted as a dwelling unit each.
Hotel Parlor	A room within a hotel used primarily as a social or living room of a hotel suite. It may have a wet bar and/or kitchen, bathroom, closets, balcony and sleeping accommodations. The hotel parlor shall be considered a part of the hotel suite dwelling unit.
Hotel Suite	Any interconnected cluster or group of rooms in a hotel property where each room joins directly into a common parlor, interior hallway, or common entry foyer. Any room of the hotel suite may "lockoff" from the remainder of the suite, with direct access to the corridor, foyer, or outside entry, and still be part of the suite. Hotel suites shall be considered one dwelling unit. A hotel suite shall have no more than three lockoffs and one kitchen per unit.
Hotel Room Entry Foyer	The enclosed entry area of a hotel suite or hotel room. This entry must have the capability of being "locked off" from the adjacent public space, such as lobby, circulation corridor or sidewalk. The entry foyer shall be considered part of the hotel suite dwelling unit.

Architecture

Roofs

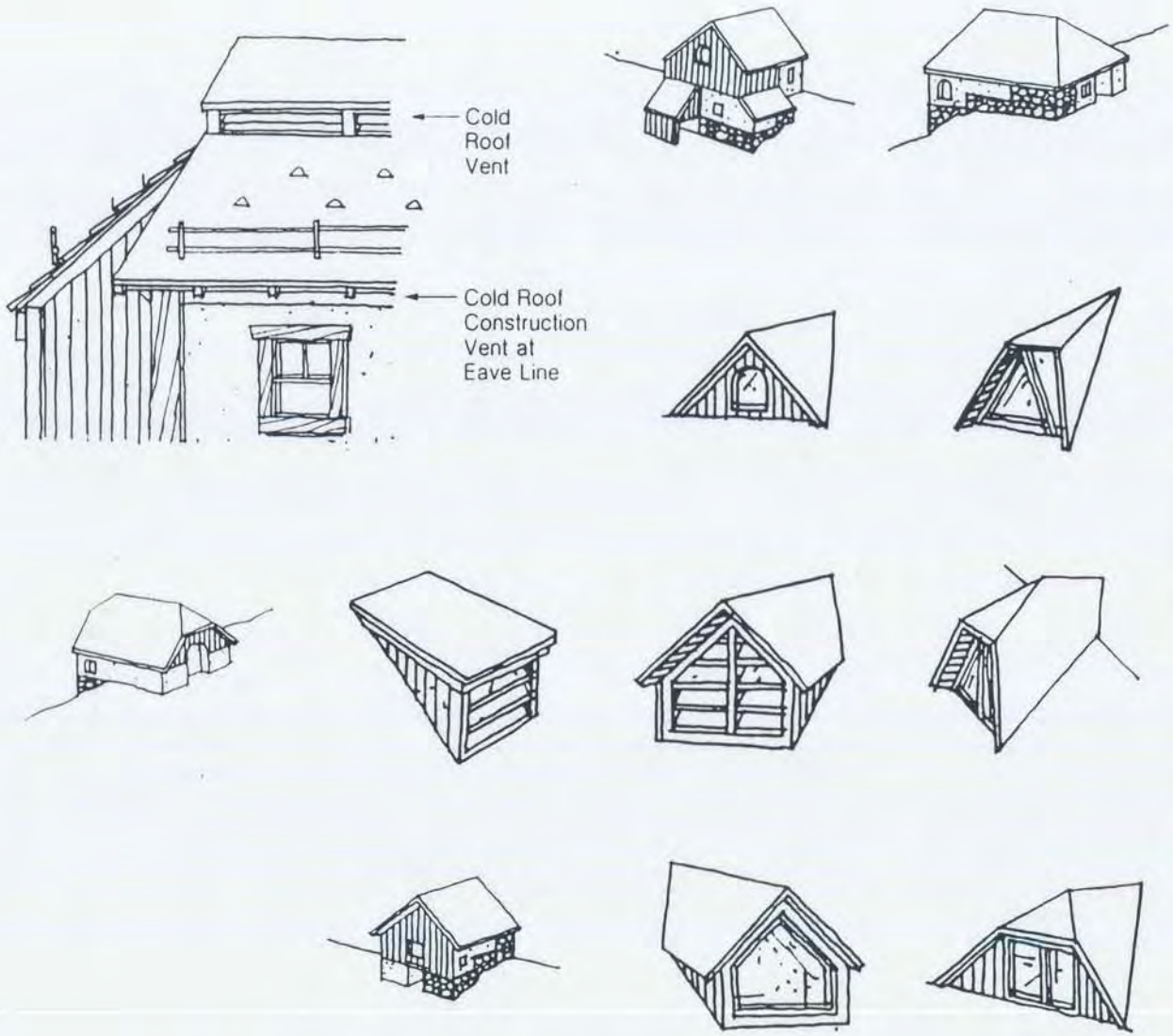


All major roofs shall have pitches not less than 6:12 and not greater than 12:12. Major roof forms shall be restricted to gable and hip roofs. Secondary roof forms attached to the major building form may be shed roofs with pitches not less than 4:12.

Dormers should be relatively small in proportion to the overall scale of the roof. They should be gable, hip or shed forms.

Architecture

Roofs (continued)



Pedestrian and vehicular areas shall be protected from roof snow shedding where roof pitches exceed 6:12. This can be accomplished through secondary roofs, snow clips and snow fences on roofs. All roof structures shall be designed to conduct rain and snow melt water in such a way as to prevent it from creating a dripping, icing or flooding menace on pedestrian or vehicular areas below.

The Design Review Board shall review projects on an individual basis to assure that adequate systems and devices are installed to allow safe and effective removal of snow from roofs.

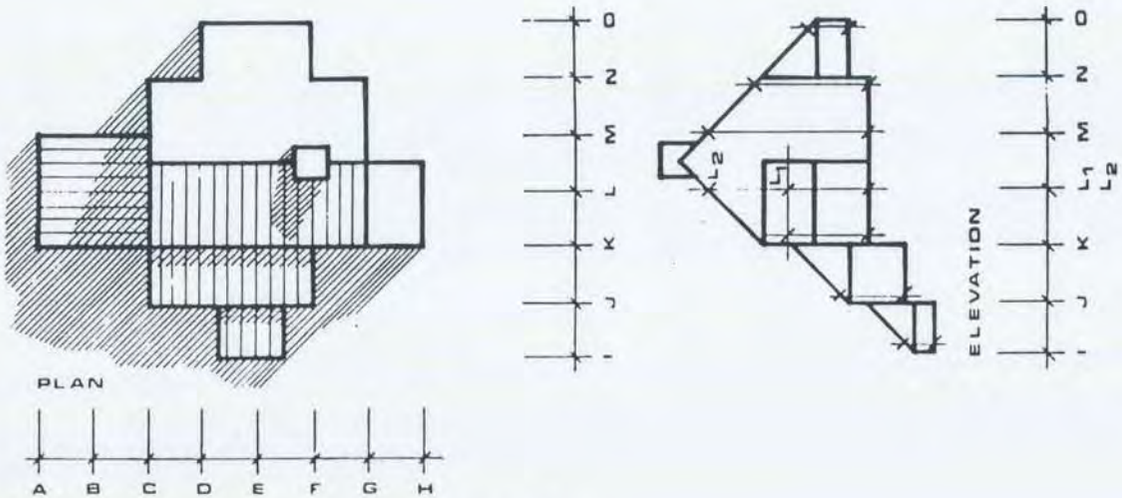
In the Village, all roof material shall be flat profile unglazed tile as approved by the Design Review Board. Flashing, gutters, and bay window roofs should be copper

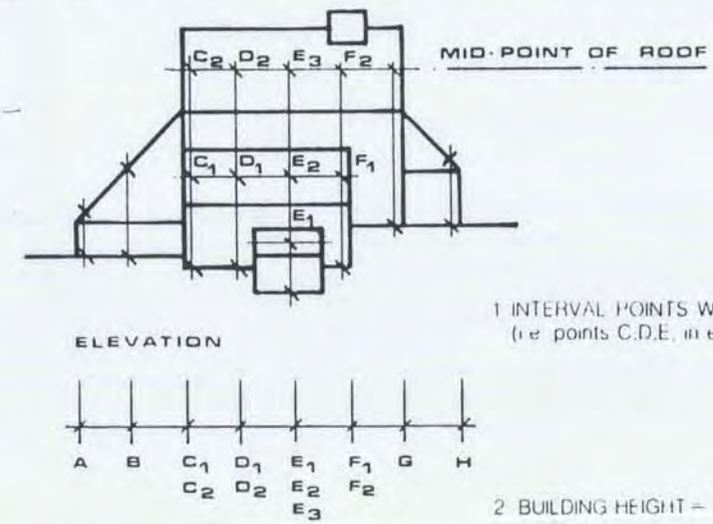
All structures in the Village shall have a cold roof assembly or written approval from the Design Review Board for an alternative method of preventing ice build-up along the eaves.

Outside the Village, roof material shall be unit pieces such as slate, flat-profile unglazed tile, cedar shingles, or continuous vertical boards over built-up roofing. Tile colors shall be blue-gray, green-gray, or brown-gray and should have a weathered appearance. Glazed tiles, metal roofing and asphalt shingles shall not be used. It is recommended that cold roof design be used for roofs over heated interior spaces to avoid ice damage to the roofs and eaves.

Architecture

Building Height Limitations





1 INTERVAL POINTS WITH MULTIPLE HEIGHTS = $\frac{C_1 + C_2}{2}$
(i.e. points C,D,E, in example)

or

$\frac{E_1 + E_2 + E_3}{3}$

2 BUILDING HEIGHT = $\frac{\text{SUMMATION OF ALL HEIGHTS FROM ALL ELEVATION}}{\text{NUMBER OF INTERVALS TAKEN}}$

Building height limitation within the Village (Tract A) shall be restricted to 55′ from finished grade to a point midway between eave and ridge. Building height limitation outside the Village shall be restricted to 35′ from finished grade to a point midway between eave and ridge. The building height definition for complex buildings is as follows.

In determining building height, a vertical distance shall be taken at a series of points at equal intervals around the perimeter of the building. The intervals may be of any equal distances less than 30 feet each. Within each interval, the height of any roof with a horizontal projection of 10 feet or greater shall be measured from finished grade to the respective mid-point between the eave and ridge. These heights shall then be averaged to determine the height for that specific interval of the building. Finally, the height of the building shall be determined by averaging the heights of all intervals around the building. Finish grade for purposes of these height calculations shall be the final elevation of the surface material (soil, paving, decking, or plaza) adjacent to the building at the specific interval point as shown on the architect's site plan. This definition does not intend to allow high rise towers surrounded by low roof structures, or other mechanisms which circumvent the intent of this requirement. Any building design which appears questionable from a building height standpoint is subject to approval by the Design Review Board.

Architecture

Exterior Walls

Major building forms should express a simplicity and directness responsive to the heritage of mountain architecture. Complexity and contradiction of form and expression should be avoided.

Major exterior walls should convey a sense of mass through plaster or rock. Window openings in mass walls shall be relatively small in scale and be used in an informal pattern on the wall, with deep set reveals and varied proportions. Plaster shall have a soft undulating appearance similar to adobe, with an avoidance of sharp edges. Both plaster and rock shall always express mass and not be used as infill panels.

In contrast to the mass walls, vertical wood siding can be used as a sheathing, especially at gable ends and upper levels. Glass can also be used to contrast with the mass walls on southern exposures (see section on *Solar Design Guidelines*). Generally, the heavier rock and plaster surfaces shall be below, and visually supporting the lighter wood-sheathed elements above.

Wall materials should respond to the orientation of the building, with the north closed off (small window openings) and the south open to sun exposure (see section on *Solar Design Guidelines*).

Architecture

Exterior Walls (continued)

Only the following materials shall be used for exterior walls:

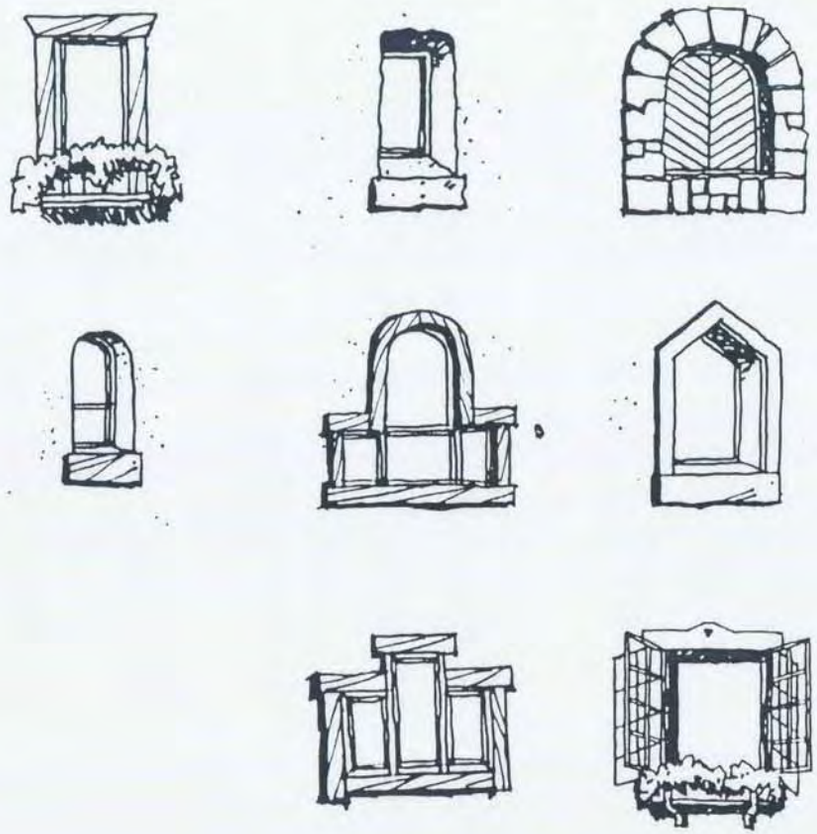
- Wood siding. In the Village, natural wood (western cedar or redwood) sound tight knot or better, without heavy pigment stain or paint. An Eagle County variance allows non-fire-rated wood up to a height of 50 feet above grade. Where wood is used above 50 feet only NCX-treated redwood is permitted. Outside the Village, natural wood (western cedar, redwood, spruce, or pine).
- Plaster (stucco or Drivit/Settef) in warm off-white colors. Refer to the Color Guide.
- Rock, approved by the Design Review Board. Rock walls shall have deep reveals between rocks and minimum exposure of mortar. Volcanic rock and unit masonry are not acceptable as exposed exterior material. Rock walls shall be laid in a random pattern.
- Exposed concrete, preferably textured and tinted with a warm tan or brown additive, will require specific written approval of the Design Review Board.

Architecture

Colors	The colors of the Village should relate to the levels of perception discussed in the Design Theme. From a distance, colors should blend with the natural landscape; the predominate roof color should be the blue-gray tile. Within the streets and public spaces, the enclosing walls should be predominately warm off-white colors tinted from beige and tan to subtle mauves and earth tones. The details such as window trim, soffits, and graphics should be accented with rich color against this subdued background.	The winter climate of Beaver Creek suggests the use of warm colors – ochre, rust, yellow, orange sienna – for details to enliven the Village streets and provide a psychological and visual warmth to the area. See the Color Guide for specific color descriptions.

Architecture

Windows



Window casing shall be wood. Approved finishes are natural, stained, painted or clad. Exterior window trim shall relate to other building materials, either wood or masonry. The use of headers and sills, designed integrally with the wall, is encouraged. Window locations should appear in a random pattern, rather than in a symmetrical, repetitious or formal pattern. Refer to the Color Guide for acceptable exterior window casing and trim colors.

Windows shall be used in combinations to avoid large uninterrupted glass areas. Windows shall have a double or triple glazing. No uninterrupted glass area shall exceed 20 square feet. Mirrored glass is not allowed. If shutters are used they shall be operable and not used merely as an ornament.

Architecture

Energy Conservation	As a minimum, the following energy conservation measures shall be followed:	• Roofs insulated to R-30; • Walls insulated to R-19; • Perimeter of slab on grade insulated to R-12 to a depth of 4 feet; • Openings in exterior walls and roofs caulked all around; • Windows double or triple glazed; • Windows and doors weatherstripped.

Architecture

Historic Preservation

The Beaver Creek Valley has had a history typical to many high mountain valleys in Colorado. The valley has seen the passing of Ute Indians, fur trappers, adventurers, loggers, miners, and ranchers. Each has left a heritage with the valley which can and should be reflected in the architecture and artwork of the present destination resort. While the intent is not to recreate past eras, it is appropriate to respect and recall the times, structures, and people that have influenced the area.

Many of the early homestead structures of the valley will be restored as part of the recreation and trail system of Beaver Creek. In addition, there are many historic photographs and artifacts which are available through the Design Review Board for possible incorporation into new buildings and interiors. Many of the personalities, events, equipment, and folklore have been used for trail names on the Beaver Creek mountain and are equally appropriate for names within the Village.

The Beaver Creek design theme has incorporated the simple forms, pitched roofs, and native materials of early valley structures. New development should further respond to historic influences through interpretative details and artwork.

Reference: June B. Simonton, *Beaver Creek: The First One Hundred Years* (1980).

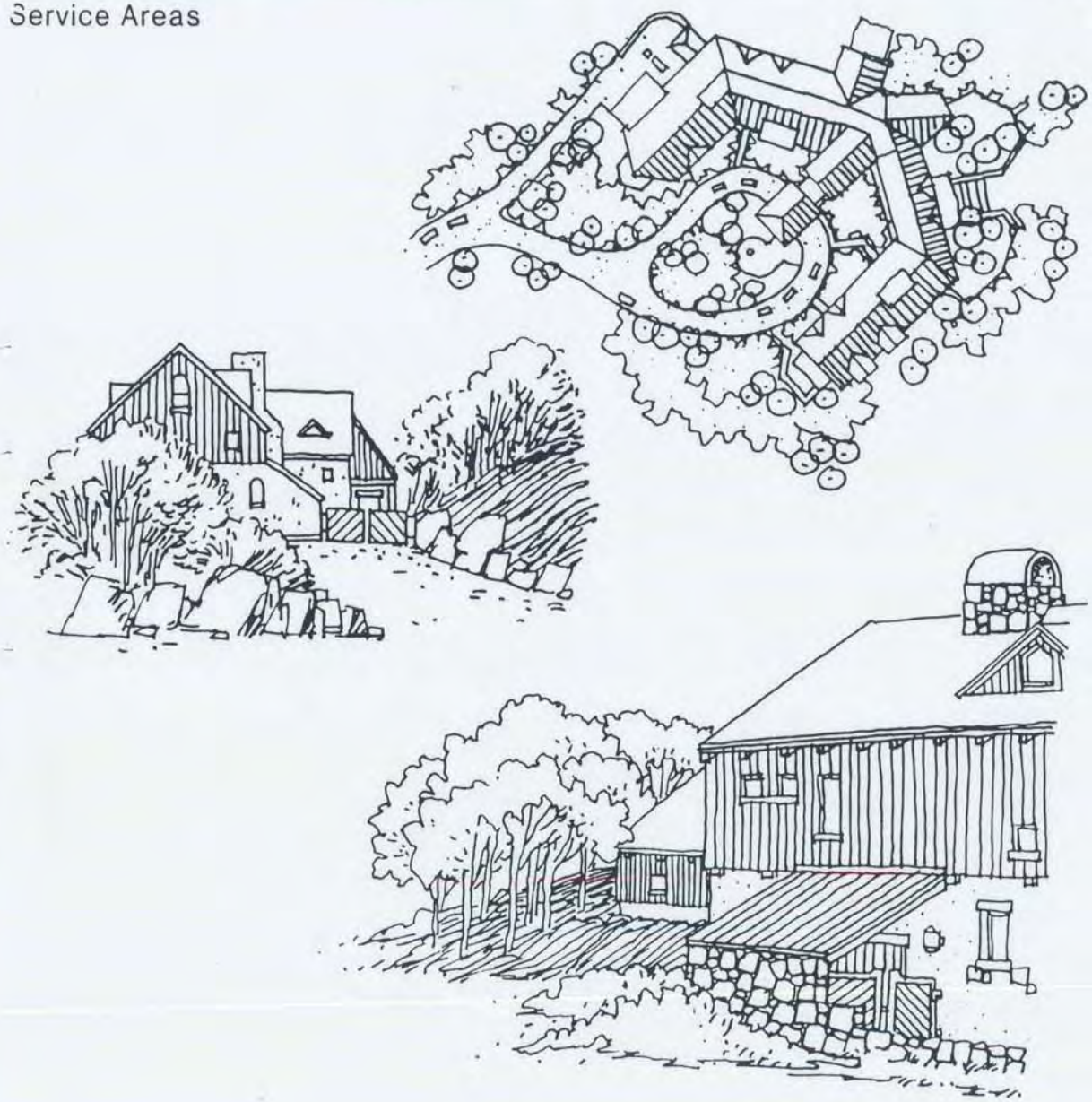
Foundations

Foundation walls shall not be exposed for more than 8" in a vertical direction, unless they are faced with wood, plaster or rock as delineated in the section on *Exterior Walls*, or unless written approval is obtained from the Design Review Board for exposed foundation walls. Such visually exposed concrete or block masonry foundations shall be stained or textured as required by the Design Review Board.

Foundations shall be designed by an architect or professional engineer to be consistent with the soils reports for the specific site.

Architecture

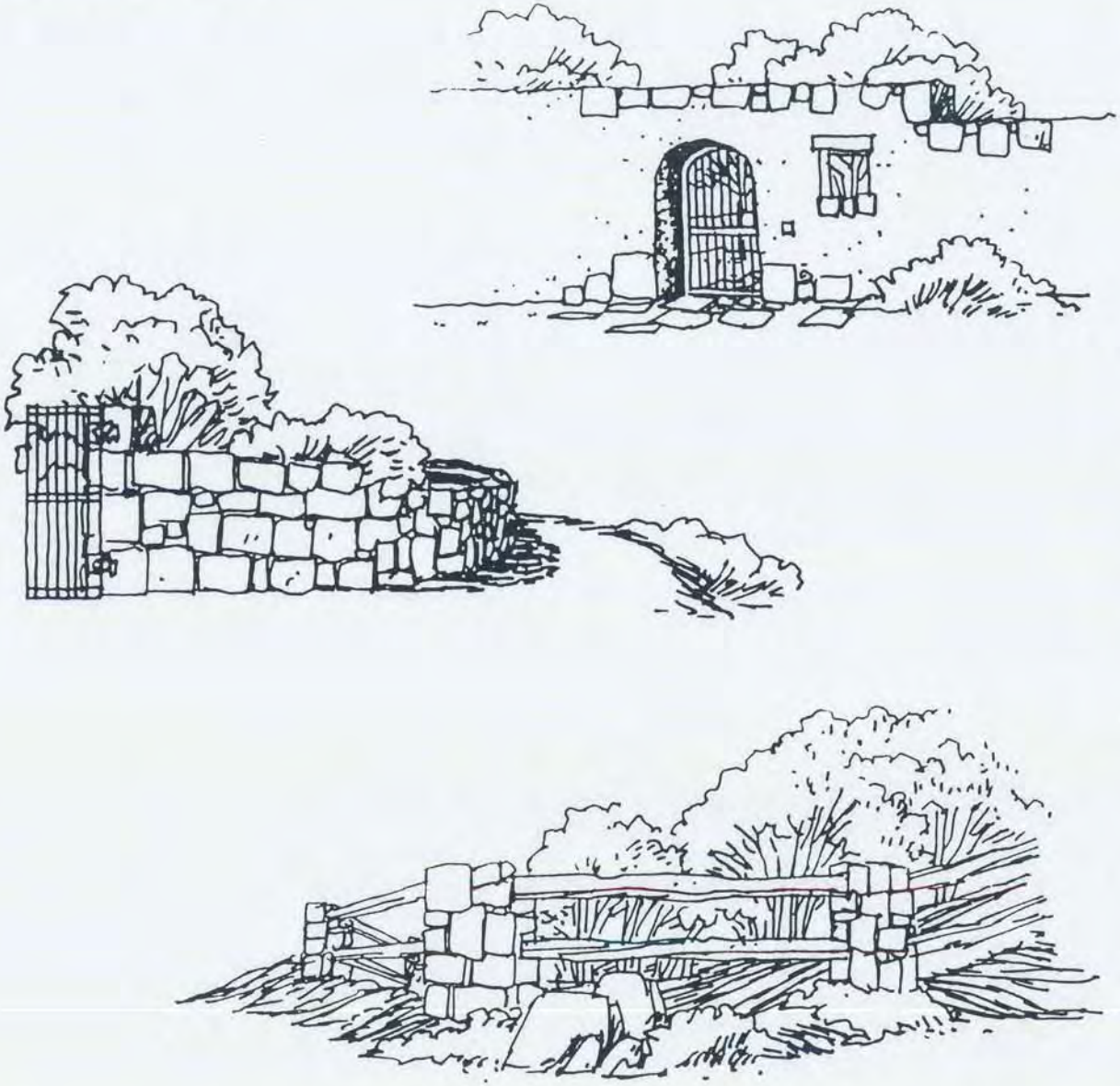
Service Areas



Each building shall have a service and trash removal area(s) which shall be fenced, walled or bermed from public view, and provide access which does not conflict with pedestrian circulation. Trash containers shall be inaccessible to wildlife. Fencing or walls shall be compatible with the materials and forms of the building. Refer to section on *Walls and Fences*.

Architecture

Walls and Fences



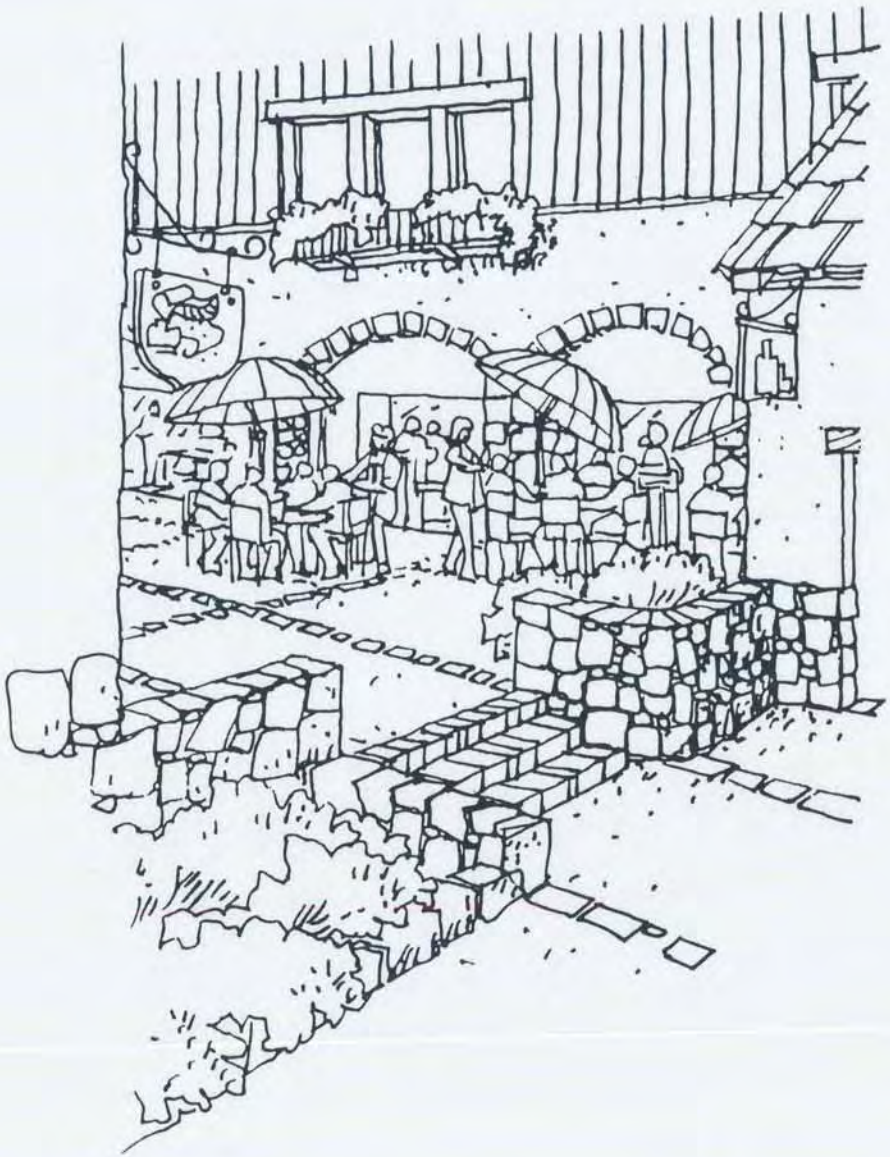
Within the Village, adjacent to the plaza and mall, walls shall conform with the colors, textures and forms of adjacent buildings and be constructed of the following materials:

- Rock approved by the Design Review Board. Rock walls shall have deep reveals between rocks and minimum exposure of mortar. Volcanic rock and unit masonry are not acceptable as exposed exterior material. Rock walls shall be laid in a random pattern.
- Plaster (stucco or Drivit/Settef) applied to a subsurface strong enough to prevent punctures or flex cracking. Plaster shall have a soft undulating appearance similar to adobe, with an avoidance of sharp edges.
- Concrete, tinted tan or light brown, and textured or board-formed. This material will be allowed only if it is designed in a manner which relates to adjacent buildings and surrounding landscape improvements.

Wood fences shall not be used in the Village. Outside the Village, fences shall be rock walls or a horizontal see through wood such as split rail or buck fences, except for screening service areas, where fences shall be solid and compatible with the structure. All wood fences, if not rock wall, shall be left natural, stained or oiled, but not painted

Architecture

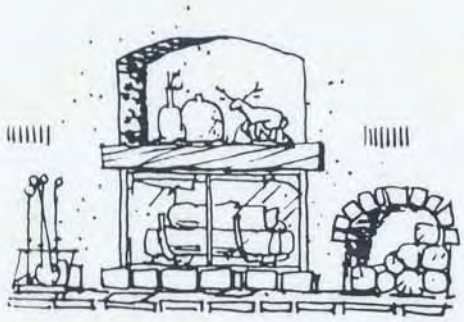
Patios and Decks



Paving material for patios and decks adjacent to the Village pedestrian street shall be similar to, and compatible with, the pedestrian street paving material in both color and size. The paving material shall be red sandstone unless an alternative material is approved by the Design Review Board.

Architecture

Fireplaces



Each fireplace shall have a flue temperature sensor device and an indicator light, both of which are connected to the Beaver Creek Communications Center. The flue temperature sensor will inform the Communications Center whether the fireplace is in operation, and the indicator light will allow the Communications Center to provide an alert when burning is not allowed.

All fireplaces shall be a type determined by the Beaver Creek Resort Company to be most efficient, with regard to operating and emission standards. Fireplaces shall have glass doors, outside combustion air supply, and heat conveying features.

The Beaver Creek Metropolitan District requires that all fireplace operation in Beaver Creek be monitored and signaled in the event that minimal air quality standards in the community are exceeded.

In order to notify the applicable residences of this condition, a warning light will be installed by the developer in a visually unobstructed area adjacent to each fireplace.

Compliance to such notification will be determined, after a reasonable period of time, based on the temperature of the fireplace flue. The temperature-actuated signal will be provided by the developer via the installation of an appropriate sensor element and receiver switch. Temperature switch actuation threshold shall be nominally 150° F.

For maintenance purposes, all designs to this criteria shall provide reasonable access and otherwise allow for the normal replacement of all active components.

The specific requirements for fireplace monitoring systems are explained in the Communication System Regulations.

Due to high emission levels, wood-burning stoves are prohibited without written approval of the Design Review Board.

The Design Review Board shall allocate the number of fireplaces. All fireplace allocations shall be obtained in writing from the Design Review Board. Unless further stipulated through written authorization from the Design Review Board and Eagle County, fireplaces in Beaver Creek shall be limited to one per dwelling unit and one per restaurant.

Architecture

Chimneys, Flues and Roof Vents

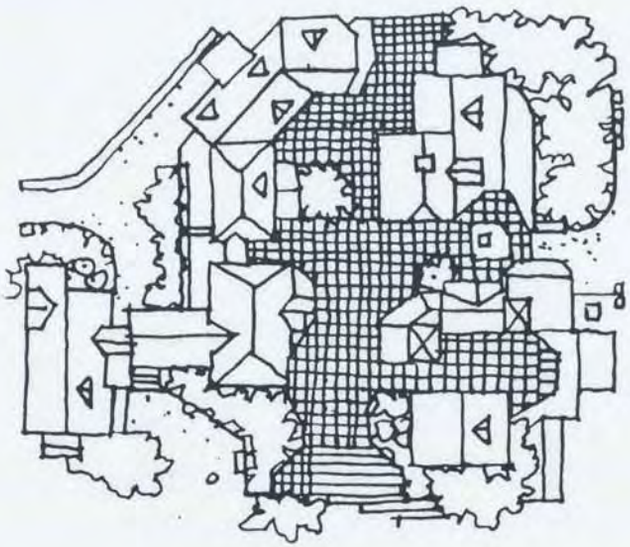
Chimneys and flues shall be designed in such a manner so as not to cause fumigation of ground level areas or adjacent buildings during downslope wind conditions. Chimneys should be located high on the upwind side of the building as the best means to insure adequate disbursement.

Vents and flues shall not be exposed galvanized pipe, but rather attempts shall be made to group these roof projections and conceal them from public view. This can be done by enclosing them in forms compatible with the structure.

Solid Waste Removal	To insure that solid waste is collected, compacted and hauled away in a manner that insures safety, reduces hauling costs, eliminates litter and spillage, and prevents odor and cross-contamination, waste collection spaces must be designed carefully, and equipment must be selected which meets approved design standards. Specifically, solid waste collection systems in all Beaver Creek buildings and facilities must meet the following guidelines: • Trash compactors which meet standards approved by the National Solid Wastes Management Association must be utilized and located in central waste collection areas. Compactors should be selected which maximize compaction rates and thereby reduce hauling requirements. • Trash compactors must be integrated with closed, steel containers that meet Beaver Creek Resort Company hauling specifications.	• Solid waste collection and reduction areas must be designed so that waste is *not* exposed to the atmosphere. If a vertical chute waste transport system is interfaced with a compactor, there must be sufficient head height, along with length and width to allow the bag or loose waste to drop into the compactor receiving chamber without bridging. The connection between the chute system and the compactor must be tight so that no waste can escape. • The space allotted for installing a compactor should allow for proper servicing of the equipment. If the waste collection equipment is installed indoors or in a protected area, proper cleaning facilities (e.g., hose and outlets, floor drains) should be provided. Fire protection devices must also be provided. • Trash collection areas shall not conflict with pedestrian circulation areas.

Site Plan

Building Siting



Building siting within the Village is critical due to the close integration of public spaces and adjacent buildings. This relative tightness of spaces within the commercial core area has been established to create the scale of the pedestrian village. In establishing locations and siting, buildings shall relate to adjacent and surrounding structures. It is important to consider the "void" or exterior spaces between buildings which will provide the public spaces, streets and arcades within the Village. Study of these areas should include evaluation of mass models which describe the surrounding buildings, as well as the building under consideration.

Building siting within the Village shall relate to the movement and circulation patterns of the Village. This includes a strong integration of retaining walls, walkways, patio decks, and planter areas which help establish and direct the flow of pedestrian and vehicular traffic. Pedestrian circulation should be continuous, without interruptions or barriers.

All buildings within the Village area will be required to maintain a proper setback for building code and fire regulations from their common and respective property lines. Service access and public arrival points shall be established in the initial site plan studies.

Outside the Village, building siting shall be especially responsive to features of the existing terrain, drainage patterns, rock outcroppings, vegetation, views, and sun exposure.

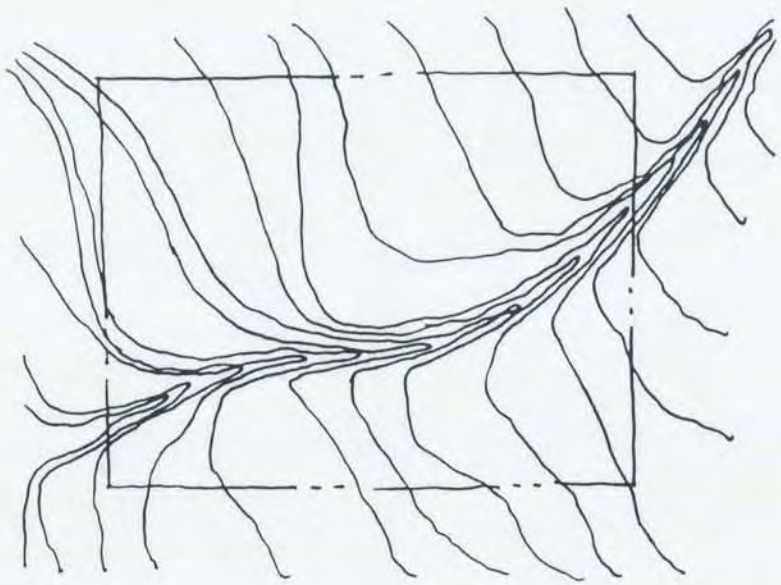
Landscaping and grading for any site shall interface with all adjacent properties. The developer shall indicate the means of accomplishing this interface in his landscape plan.

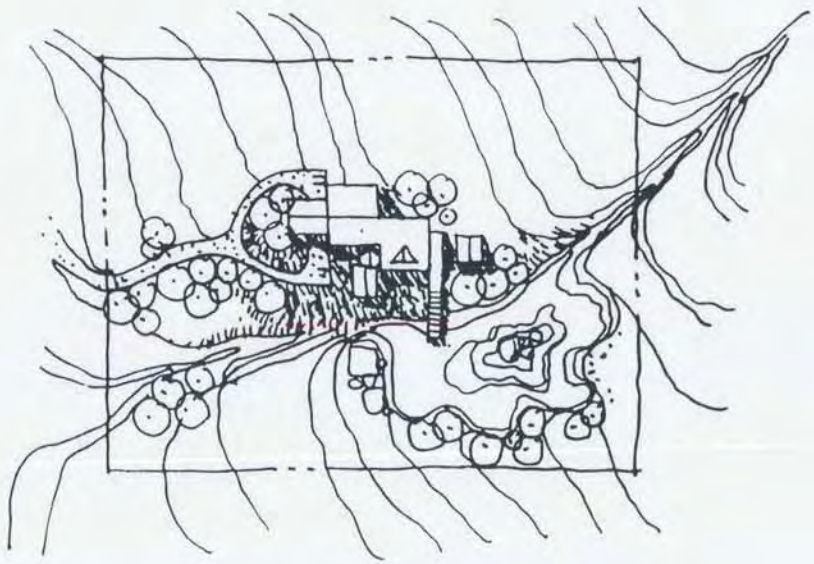
Site Plan

Grading	Grading requirements resulting from development shall be designed to blend into the natural landscape. Cuts and fills should be feathered into the existing terrain within the property boundaries. Retaining walls and cribbing should utilize natural materials such as wood timbers, logs, rocks and textured, board-formed or color tinted concrete. Slope of cut and fill banks should be determined by soil characteristics for the specific site to avoid erosion and promote revegetation opportunities, but in any case should be limited to a maximum of 2:1 slope.	Utilities	All trunk utility lines and pipes at Beaver Creek are underground. Connections from trunk lines to individual structures must also be underground. Sewage disposal systems shall be installed pursuant to the regulations of the Upper Eagle Valley Sanitation District. No individual septic and leachfield systems, nor individual wells are allowed. All outdoor utility tanks, metering devices, transformers and other similar devices shall be concealed from the view of public spaces and neighboring properties. No exterior antenna shall be erected without specific written approval of the Design Review Board. See the section on *Walls and Fences* for means of enclosure.
		Exterior Mechanical and Electrical Equipment	

Site Plan

Drainage





There shall be no drainage across neighboring property lines unless written approval is obtained from the Design Review Board.

Within the Village, curbs and gutters are to be used only when severe drainage problems are present. Storm drainage shall be connected to the storm sewer mains wherever practical and shall not be connected into the sanitary sewer system.

Outside the Village, drainage patterns within the site may be modified, but the modification must be consistent with the Beaver Creek Master Drainage Plan. There shall be no curbs and gutters without written approval of the Design Review Board. Storm drainage shall not connect into the sanitary sewer systems.

In all areas, runoff from impervious surfaces, such as roofs and pavement areas, shall be directed to storm sewers, to natural or improved drainage channels, or dispersed into shallow sloping vegetated areas.

Site Plan

Parking

Parking requirements are as follows:

- Hotels and lodges - .5 spaces per unit
- Condominiums - 1 space per unit
- Commercial space - 1 space per thousand square feet
- Restaurants - 1 space per 10 seats
- Other areas - as per Design Review Board allocation.

Indoor parking space sizes are 9 x 18 feet for regular spaces and 8 x 17 feet for compact spaces. 20% of all structured spaces may be compact spaces. All exterior parking spaces will be 10 x 20 feet.

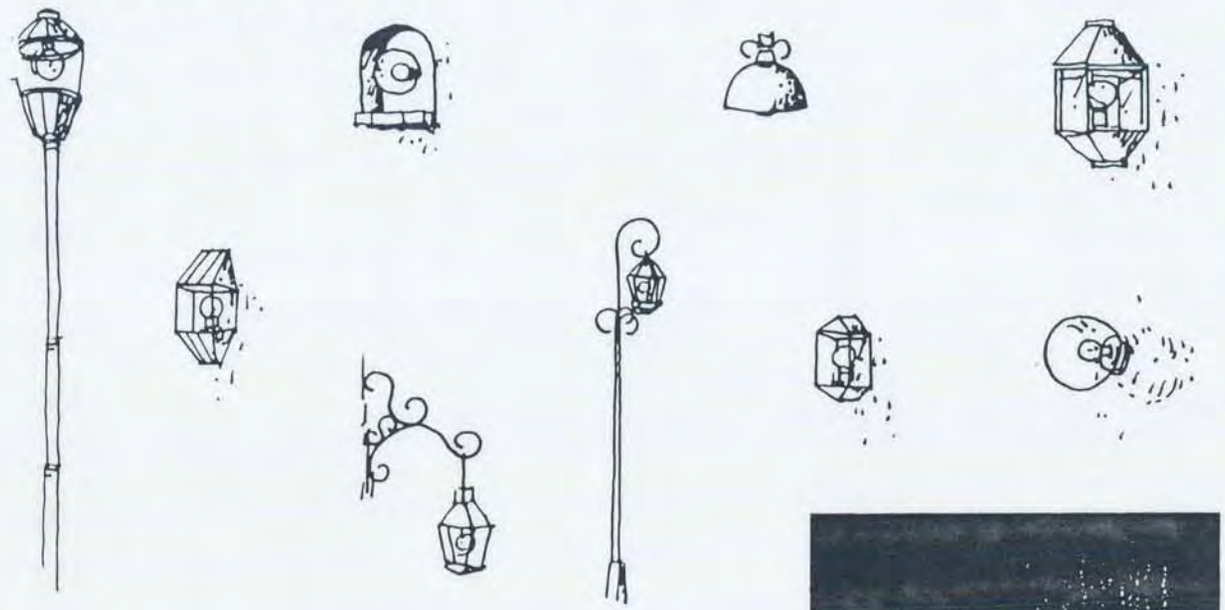
Within the Village all parking, except temporary drop-off spaces as allocated by the Design Review Board must be within structures.

Driveways

Driveways leading to building entries or public arrival points within the site boundaries and connecting to the paved portion of any street (including the construction of any culverts, landscaping, maintenance and snowplowing that may be necessary) are the responsibility of the owner. Maximum driveway grades shall not exceed 5% for the first 20 feet from the roadway, and shall not exceed 10% elsewhere. Driveway surfaces shall be asphalt, cobbles or sandstone pavers. In addition, the owner shall comply with all regulations of the Beaver Creek Metropolitan District pertaining to the construction of any part of the driveway built within the District's road easement.

Landscape

Exterior Lighting

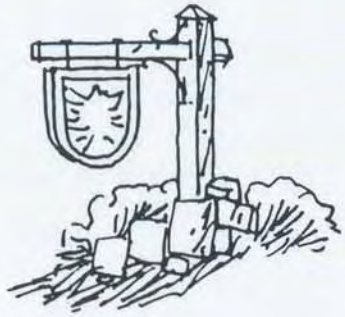


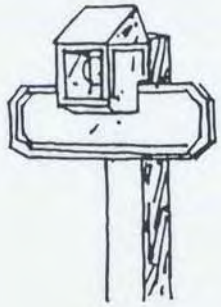
Understate exterior lighting and maximize indirect lighting. Exterior lighting shall not be installed where its direct source is visible from neighboring properties, or where it produces excessive glare to pedestrian or vehicular traffic. All building or landscape lighting shall be white or pale yellow, however, colored lighting would be allowed as part of a storefront or sign with specific written approval of the Design Review Board.

Exterior lighting should provide a subdued ambient light level while accenting landscape, artwork, and building features. All exterior lighting shall be designed by a professional lighting consultant.

Landscape

Residential Identification Signs

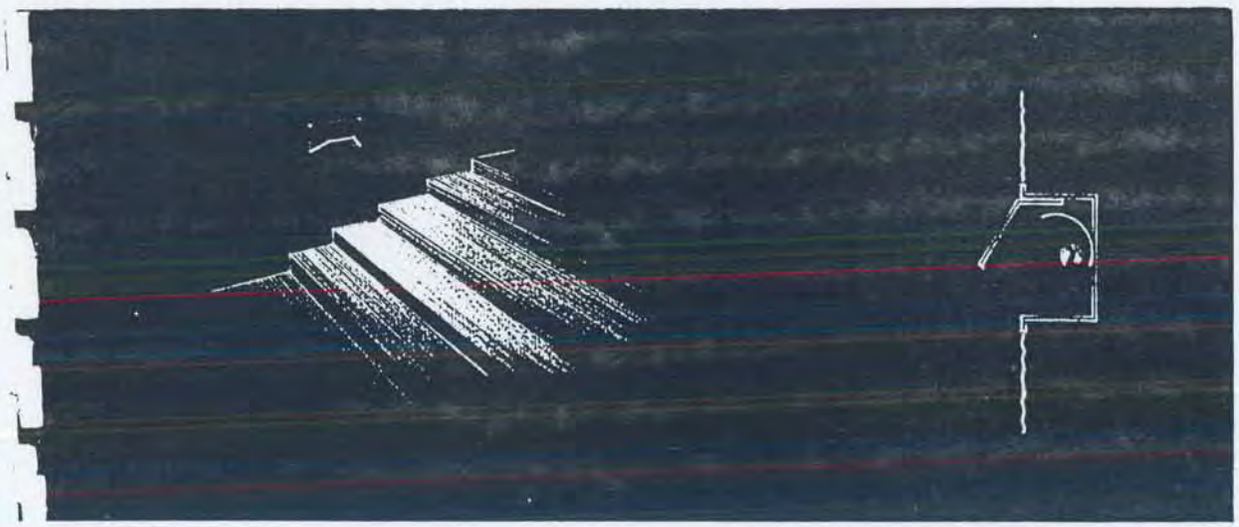




All residential signs must have written approval of the Design Review Board. All residential units must have street number signs, lighted, located at the driveway entry. The light source must be concealed, with minimum glare to pedestrians or automobiles. Individual unit signs shall be a minimum of one square foot and a maximum of four square feet. The overall project identification sign shall not exceed 20 square feet. (See *Commercial Space Design Regulations for Commercial Signs.*)

Landscape

Paths and Walkways



Paths and walkways provide the critical pedestrian connections of the Village. Every project must include the design of convenient pedestrian routes as part of an integrated master plan system for Beaver Creek.

Walkways should include points of interest, activities, and design features along their routes. Fountains, benches, sculpture, bridges, and archways should become part of the pedestrian experience. Vertical changes should be accomplished through ramps or stairs with 6 inch risers and 16 inch treads to accommodate ski boots. Surface materials should be rich and varied at focal points using cobbles and sandstone pavers. Connecting links of major routes may be surfaced with asphalt, concrete, or sandstone pavers. Minor paths may use wood chips, crushed rock, or asphalt. Major routes should be a minimum of six feet in width and lighted for evening use.

Landscape

Erosion Control and Revegetation	An initial Erosion Control and Temporary Site Stabilization Plan in required for each project prior to Sketch Plan Approval (see section on Design Review Process). A detailed permanent Erosion Control and Revegetation Plan is required prior to Final Plan Approval. These plans shall explain in detail the following: • Measures to control both ground water and surface water runoff; • Temporary measures to retain all eroded soil material on site during construction; • Measures to permanently stabilize all disturbed slopes and drainage features upon completion of construction.	The owner/developer shall, for Sketch Plan Approval, list and describe those techniques he plans to use during excavation and construction, and indicate on his Site Plan drawings their locations, construction details, and time of installation. The owner/developer shall, for Final Plan Approval, list and describe on his Landscape and Planting Plan those techniques he plans to use upon completion of the project to permanently revegetate and stabilize all disturbed areas and drainage features. The major concerns addressed by both plans shall be the reduction of erosive potential and control of transported sediments.

Landscape

Landscaping and Plant Materials

Landscape scale and overall landscape design shall be developed so that one senses that new vegetation is integral with the natural mountain landscape and the inherent form, line, color and texture of the local plant communities. New planting should use plants that are indigenous to the Rocky Mountain alpine and sub-alpine zones and should be located to extend existing canopy edges or planted in natural looking groups. Ornamental plants are recommended only for locations directly adjacent to building masses or in courtyards. Manicured or groomed yards shall be within areas defined by buildings, fences, walls or other defined edge modifications so that the visibility of these yards is limited to the adjacent building. Opaque plantings at traffic intersections are not permitted.

Plant materials used for erosion control shall establish immediate surface stabilization to prevent soil erosion. Diverse, self-sustaining plant species will be used to provide 80% surface cover within one growing season.

The following list of plant materials are indigenous to the Beaver Creek area and should be used according to micro-climate conditions.

Landscape

Recommended Trees, Shrubs, Ground Cover and Vines

Deciduous Trees
- Narrowleaf cottonwood - *Populus augustifolia*
- Balsam poplar - *Populus balsamifera*
- Quaking aspen - *Populus tremuloides*
- Water birch - *Betula occidentalis*

Evergreen Trees:
- Blue spruce - *Picea pungens*
- Engelmann spruce - *Picea Engelmannii*
- Subalpine fir - *Abies lasiocarpa*
- Douglas fir - *Pseudotsuga taxifolia*
- Rocky Mountain juniper - *Juniperus scopulorum*
- Lodgepole pine - *Pinus contorta*
- Limber pine - *Pinus flexis*

Shrubs:
- Thinleaf alder - *Alnus tenufolia*
- Chokecherry - *Prunus virginiana*
- Service-berry - *Amelanchier sp.*
- Mountain juniper - *Juniper communis saxatilis*
- Mountain mahogany - *Cercocarpus montanus*
- Shrubby cinquefoil - *Potentilla dasiophora*
- Wildrose - *Rosa sp.*
- Raspberry - *Rubus strigosus*
- Sage - *Artemisia sp.*
- Rabbit brush - *Chrysothamnus sp.*
- Red-berried elder - *Sambucus pubens*
- Mountain ash - *Sorbus scopulina*
- Willows - *Salix sp.*
- Snowberry - *Symphoricarpos oreophilus*
- Goose or current berry - *Ribes sp.*
- Subalpine rock spirea - *Spiraea densiflora*
- Bitter brush - *Purshia tridentata*
- Buffaloberry - *Shepherdia canadensis*
- Mountain maple - *Acer glabrum*
- Lilac - *Syringa sp.*

Shrubs: (continued)
- Thimbleberry - *Rubus deliciosus*
- Mountain mockorange - *Jamesia americana*
- Western virgins bower - *Clematis ligusticifolia*
- Bearberry honeysuckle - *Lonicera involucrata*
- Shiny-leaved hawthorne - *Crataegus erythropoda*
- Mountain lover - *Pachystima myrsinites*
- Creeping holly grape - *Mahonia repens*

Vines:
- Hop vine - *Humulus sp.*
- Matrimonyvine - *Lycium halimifolium*

Ground Cover
- Creeping juniper varieties Bar Harbor, Plumosa, Wilton
- Mock strawberry
- Wooly yarrow
- Stonecrest
- Mountain alyssum
- Pussytoes
- Alpine rockcress
- Moss sandwort
- Common thrift
- Snow-in-Summer
- Maiden pink
- Cottage pink or Grass pink
- Creeping penstemon
- Rock soapwort
- American germander
- Kinnikkinnick or Bearberry
- Spurge
- Stonecrop (sedum)
- Houseleek

Recommended Trees, Shrubs, Ground Cover and Vines (continued)

Grasses:

Seed mixes and seed rates should be adapted to specific locations and microclimates. Elevation, aspect, slope, application method and mulching are critical to successful revegetation and selection of grass species and application rates. The following grasses have been used successfully in Beaver Creek:

Type	Botanical Name	Variety
Orchard grass	Dactylis glomerata	Potomac
Annual rye grass	Lolium multiflorum	None
Perennial rye grass	Lolium perenne	Pennfine
Smooth brome	Bromus inermis	Manchar
Hard fescue	Festuca ovina duriscula	Durar
Slender wheat grass	Agropyron trachycalumm	None
Canada blue grass	Poa compressa	Canada
Creeping red fescue	Festuca rubra	Pennlawn
Intermediate wheat grass	Agropyron intermedium	Tegmar
Fairway wheat grass	Agropyron cristatum	None
Crested wheat grass	Agropyron desertorum	Nordan
Timothy	Phleum pratense	None

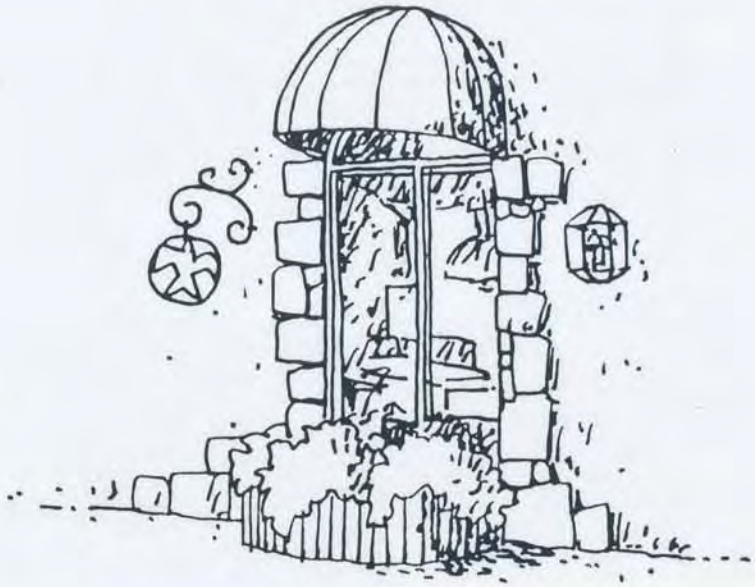
Sod varieties are available and selection should depend on the amount of sunlight and available water.

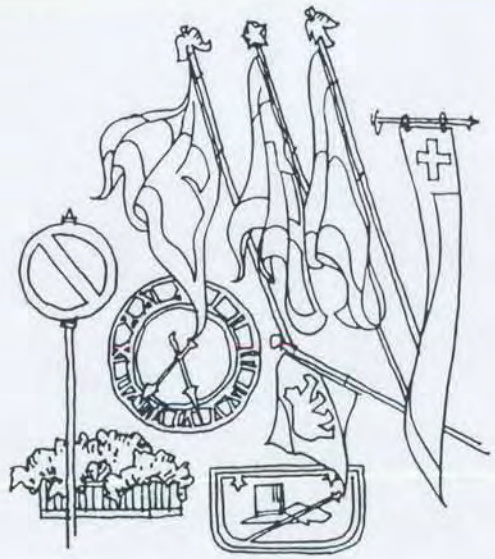
Some wildflowers that will do well and are often available through seed companies in a variety of mixes are:

Species	Common Name
Achillea millefolium	Yarrow
Aquilegia coerulea	Rocky Mountain Columbine
Cheiranthus alliouii	Wallflower
Chrysanthemum leucanthemum	Ox-Eye Daisy
Gilia capitata	Globe Gilia
Linum grandiflorum var. rubrum	Scarlet Flax
Linum lewisii	Blueflax
Oenothera lamarckiana	Evening Primrose
Oenothera pallida	White Evening Primrose
Penstemon strictus	Rocky Mountain Penstemon
Ratibida columnaris	Upright Prairie Coneflower
Rudbeckia hirta	Black-Eyed Susan

Commercial Space Design Regulations

Commercial Space Design Concept





The goal is to make the Village appealing and to achieve a consistent image which will endure. The Beaver Creek architects and designers have been charged with developing a unifying theme which expresses this timelessness.

Ultimately, the tenants are the life of the Village and it is their activities for which the malls and courtyards provide the setting. The vitality envisioned cannot be captured with stereotyped design. For that reason, rigid standardization will not be imposed on the individual tenant, but rather the Design Review Board will require that all projects strive for design excellence.

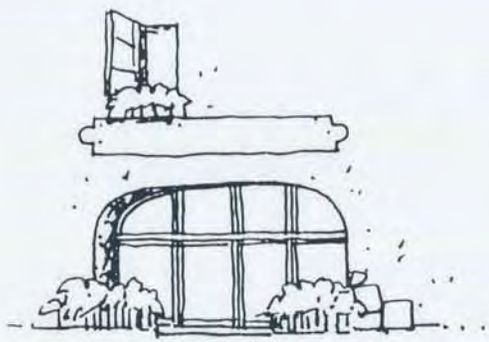
In this context there is ample room for creativity on the part of individual tenants. Variations in building orientation, exposures, and changes in the grade levels provide diverse opportunities for imaginative designs. To insure that tenant improvements are consistent with architectural theme and design standards of Beaver Creek, all plans for storefronts, signs and interiors must be approved by the Design Review Board.

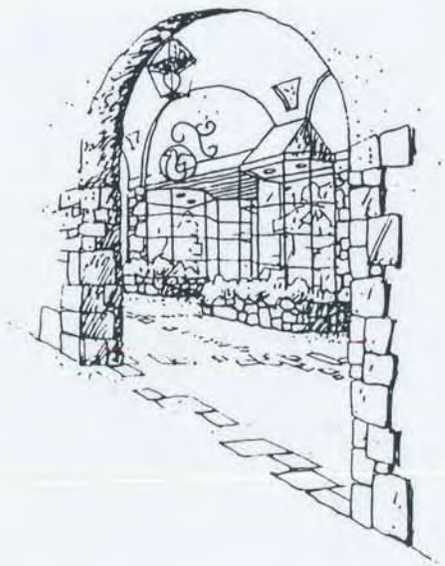
The typical shopping center tends toward uniformity, rather than revealing the personalities of the tenants. The intention at Beaver Creek is to reverse this trend.

Beaver Creek's architectural style is understated and depends on simple building forms. The design concept is to achieve overall uniqueness and vitality with imaginative storefronts, interesting window displays and graphics at the pedestrian level.

Commercial Space Design Regulations

Shop Fronts



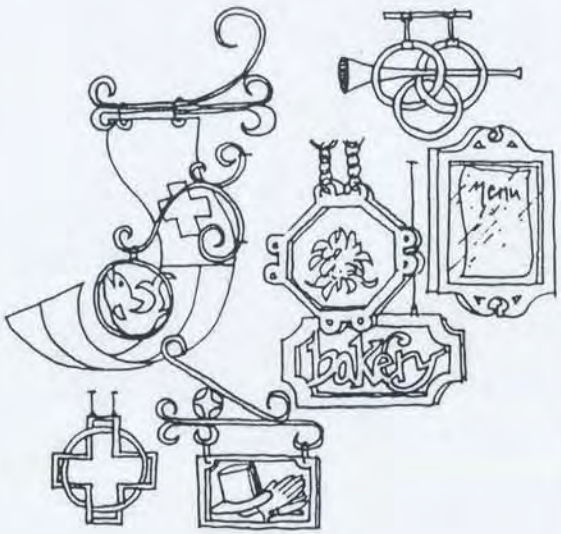


The following regulations apply to all commercial locations and shop fronts within the Village:

- The materials of the exterior facing related to the shop front must be consistent or compatible with the exterior materials of the associated building. All facings must include a good transition where they meet that of the building or an adjoining tenant.
- Window openings should be in proportion with the scale of the building with a strong harmony between storefront openings and overall building architecture. Detail elements of the storefront, such as door and window hardware, trim work, display cases, mail boxes, etc., will have no restrictions as long as they meet the Design Review Board's requirements of durability and quality of design. However, "natural" materials such as hardwood, handworked metal, and etched glass are preferred.
- All doors must be recessed (or sliding) so that they do not project beyond the face of the storefront when in an open position.
- Exterior furnishings and art work including exterior displays, sculptures, planters, etc. are encouraged and permitted with approval.
- The varying character of the Village dictates certain differences in storefront treatment. Bay windows, canvas awnings, planter areas and other imaginative designs are encouraged.
- Graphics on the storefront itself are permitted.

Commercial Space Design Regulations

Identification Signs



Identification is vital to the success of any retail or commercial venture. Beaver Creek sign control has been created to eliminate rigid uniformity as well as the uncontrolled jumble of poorly designed and brightly glaring signs.

The goal at Beaver Creek, which falls somewhere in between these two extremes, is to have interesting, colorful and tastefully designed signage that will inform, stimulate and identify each tenant. The graphic symbol which relies on images and reduces the use of words is encouraged. In many instances, the entire facade can be the sign. Conversely, small scale identification, placed at eye level, can be very effective.

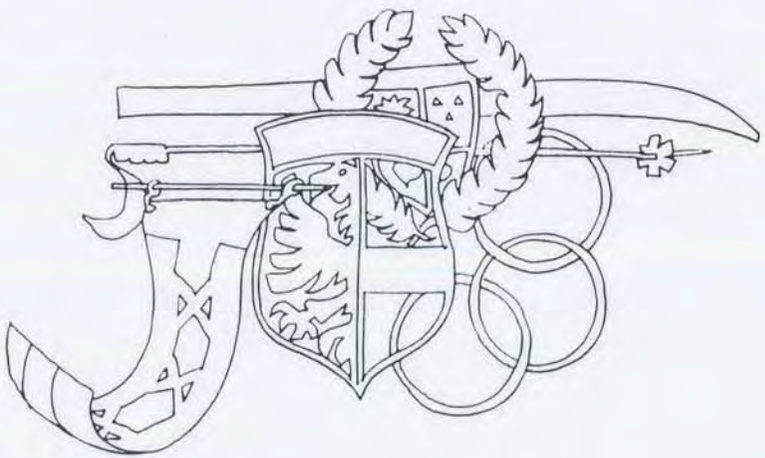
The Design Review Board's evaluation of the design will be based on design excellence, timelessness and compatibility with the design image of the Village.

The following regulations apply to all commercial identification signs in Beaver Creek:

- Graphics for signs must be included with the drawings of the storefront when submitted for approval.
- Graphics on the storefront itself will be permitted with approval.
- Projecting signs are permitted but they must maintain a seven feet, six inches clear height above the walkway. All projecting signs should make allowance for snow removal equipment which may need access to areas under or near the sign.
- The use of handcrafted metal sign brackets are encouraged. In all cases, sign brackets and mountings must be approved by the Design Review Board.
- All signs, whether lighted or unlighted, should utilize a contrasting background for legibility.
- No temporary signs may be attached outside or inside the building within ten feet of the storefront.
- Temporary tenant identification during construction of the store will be permitted with design approval.
- Special event and sale signs must be designed as a part of the overall window display.
- Permanent lettering and graphics on windows and doors must be submitted for approval.
- Sizes:
  - Boxes for display of menus, real estate listings, etc. shall be no greater than six square feet and no part is to extend above six feet, six inches from average grade.
  - Murals and supergraphics sizes and design will be reviewed for each application individually
  - Projecting and hanging signs in an arcade shall be allowed one square foot of sign face for each two feet of lineal front of the business, with a maximum of ten square feet of sign face seen from either of two directions.

Commercial Space Design Regulations

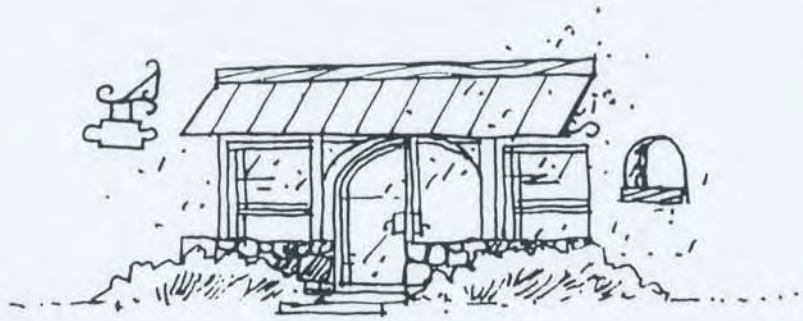
Identification Signs (continued)



- Projecting and hanging signs for an individual business within a multi-tenant building shall be limited to two square feet for each two feet of lineal front of the business to a maximum of twelve square feet as seen from either of two directions. A maximum of six square feet will be allowed for a business having minimum frontage.
- Projecting and hanging signs for single business occupant within a building shall not exceed one square foot for each two lineal feet of frontage of the building to a maximum area of twelve square feet as seen from either of two directions.
- Wall signs in an arcade shall be limited to a maximum area of eight square feet.
- Wall signs for an individual business within a multi-tenant building shall not exceed one square foot for each two lineal feet of frontage for the business having its own exterior public entrance with a maximum of eight square feet allowed for a business with minimum frontage. Combined maximum area for more than one sign shall not exceed twenty-five square feet.

Commercial Space Design Regulations

Windows and Interiors



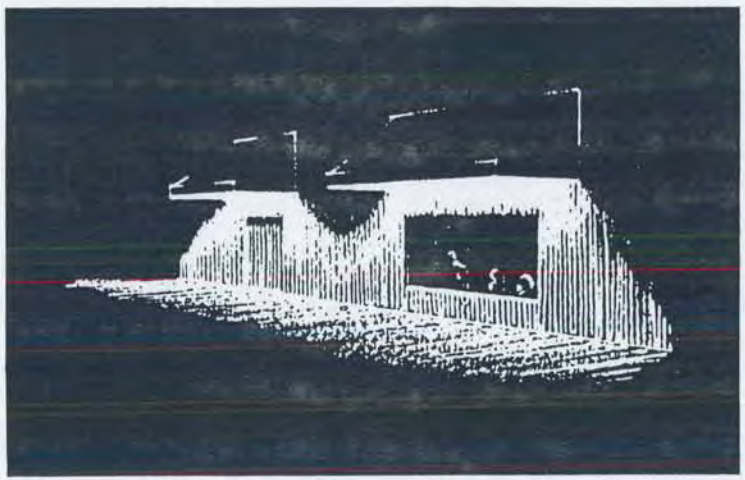
It is only fitting that imaginative store exteriors should be accompanied by imaginative window displays and interiors

Shop windows should portray the spirit and purpose of the place to which they relate. The same latitude exists in designing window displays as storefront designs. This enables the tenant to plan windows to do the best job for the type of merchandise or service provided

Frequent changes of window displays are encouraged - presenting a new face to foot traffic on a regular basis. Window displays will not be subject to Design Review Board approval

Inside, custom designed fixtures are recommended over stock items as a way of projecting the store's uniqueness and, practically, giving merchandise or services the best possible display.

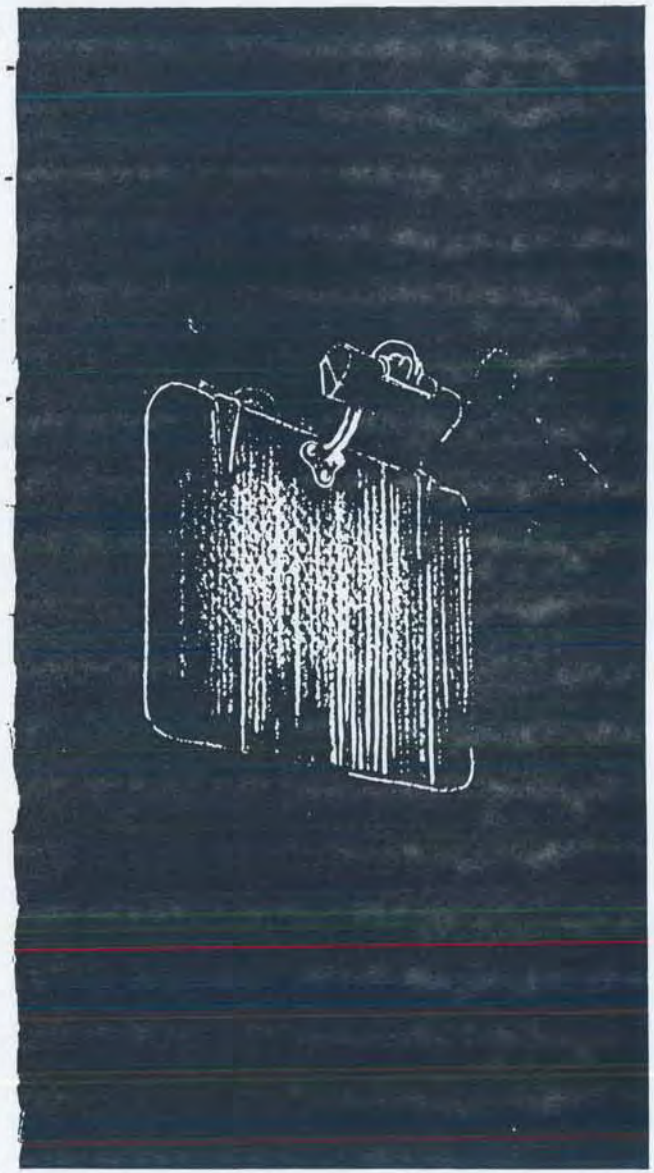
Lighting

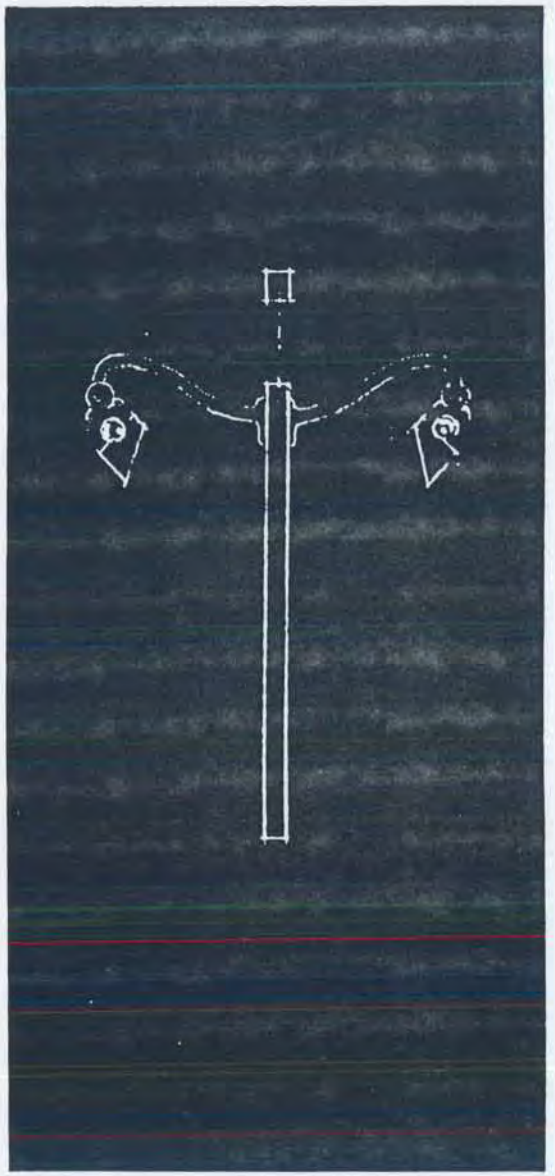


Evening hours will be important to Beaver Creek visitors, and consequently to the commercial establishment. Since Beaver Creek is depending on shop windows to provide an indirect glow of light into pedestrian malls and plazas, it is required that all display windows be designed to provide indirect lighting of adjacent pedestrian areas and be lighted at night until 1:00 a.m. It is also recommended that selected portions of the storefront visible from the pedestrian area be lighted.

Commercial Space Design Regulations

Lighting (continued)



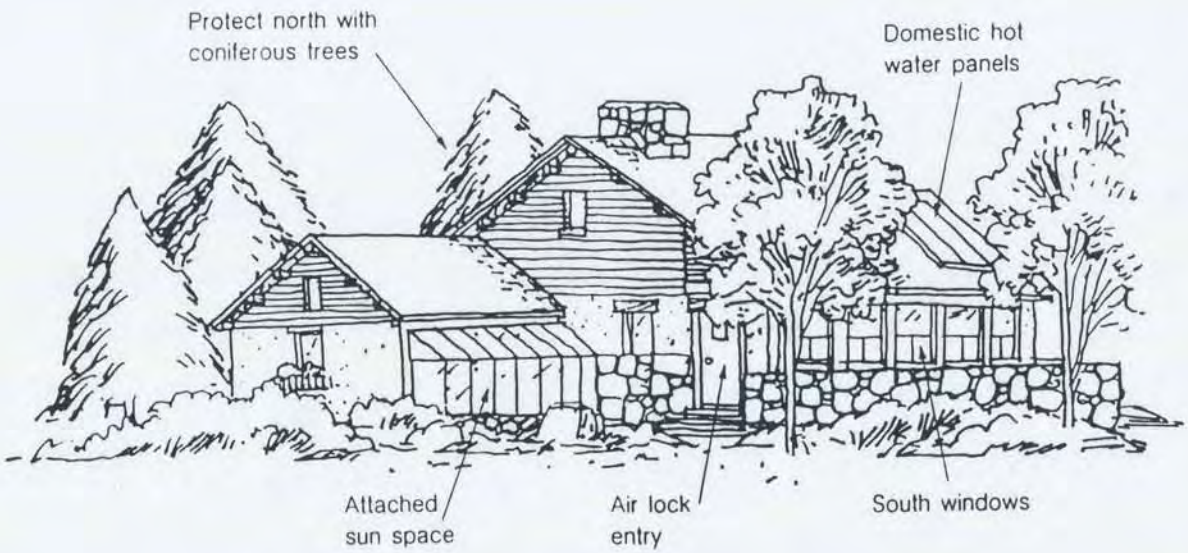


On commercial signs, backlit letters are permitted. All wires, conduits, lighting channels and transformers must be concealed. All light sources must be concealed with minimum glare to pedestrian or auto areas. No traveling or flashing light systems are permitted. Plastic faced light box signs are not permitted.

Color of light for shop fronts and signs should be limited to white and light yellow. Due to the warmth of color and relative softness, incandescent light sources are recommended for displays and pedestrian areas. Where color collected sodium vapor or metal halide sources are used, extreme care must be taken to avoid glare, harshness, and color distortion.

Solar Design Guidelines

Solar Policy



Although Beaver Creek has adopted a design theme which respects architectural concepts from historic buildings and communities, it is not encouraging the use of the traditional systems which heated those buildings. Rather, Beaver Creek strongly encourages that all new projects utilize the latest advances in the areas of energy conservation and solar design. By doing so, not only will heating costs be reduced and our natural resources preserved, but the opportunity is provided for creating an innovative, progressive energy responsive community that will set a standard for the development of resorts of the future.

Each development at Beaver Creek will have to show evidence to the Design Review Board that solar energy applications and energy conservation have been investigated in their project design. Both active and passive solar systems are acceptable. Active solar systems are readily available from various manufacturers and suppliers who will aid in the sizing of their systems. Passive solar systems are simple in concept and use, have few moving parts and require little or no maintenance. These systems do not generate pollution, since they require no external energy input and produce no physical by-products or waste. In fact, correctly designed passive solar buildings using radiant heat have comfort characteristics which equal or exceed their non-solar counterparts.

Solar Design Guidelines

General Solar Design Practices

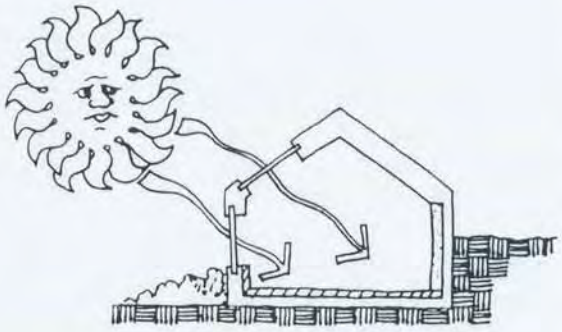
The following design practices will both maximize the solar advantage that may be obtained, as well as improve the liveability of the project:

- Elongate the building along the east-west axis, exposing more surface area to the south for the collection of solar radiation.
- Locate living rooms, dining rooms, bedrooms, and other uninhabited spaces along the south side of the structure for maximum sunlight during winter months. Locate garages, storage rooms, closets, hallways, bathrooms, utility rooms, etc. along the north side to act as a thermal buffer for the rest of the structure.
- Avoid designing patios, decks and entry ways on the north side of the structure, due to shading from the building and northwest winter winds.
- Place roof overhangs and deciduous trees (such as aspens) to the south of the structure to shade summer sun, and place berms and coniferous trees (such as spruce) to the north to protect the structure from northwest winter winds.
- Provide wind protected, air-lock entry vestibules, possibly combined with other functional spaces, such as mud rooms, entry closets or utility rooms.
- Locate the majority of windows along the south, southeast and southwest walls of the building. Provide only a minimum number of windows, only as needed for through ventilation or particular views, along the north walls. Shade south facing windows from the summer sun with overhangs or operable devices.
- Construct interior walls and floors out of thermal storage materials such as masonry and concrete. These materials will store excess heat during the day and radiate heat back into the room at night.

Passive Solar Systems	In addition to following the above design practices, there are specific passive design systems that can be applied, and that are appropriate to the Beaver Creek climate. Each system has two basic elements: glazing and thermal storage. The amount and location of glazing will determine the amount of solar radiation that is collected.	The amount and the distribution of masonry storage will determine the amount of heat that can be stored for nighttime use. This second element, thermal storage, is particularly important in residential design at Beaver Creek, where these buildings are most often only occupied during the colder evenings and nights, and left empty during the day. It should also be pointed out that, given the Beaver Creek climate (approximately 9,000-10,000 degree days), it will be necessary to have back up heating systems regardless which passive system (or combination of) is utilized. By following the methods described in the *Passive Solar Handbook, Volume Two of Two Volumes: Passive Solar Design Analysis*, the percentage of the total heating load that can be handled by solar (solar savings fraction) can be estimated for any given project. Although there are several combinations and variations, the following three systems will be briefly explained in this section: Direct Gain, Thermal Storage Walls, and Attached Sunspaces.

Solar Design Guidelines

Direct Gain



The Direct Gain system is simply heating the actual living space directly by sunlight. Sun penetrates south facing glazing and is absorbed by masonry or concrete floors and/or masonry, concrete or water filled walls. At night the masonry or concrete radiate this absorbed heat back into the living space.

The guidelines listed below should be followed when using a Direct Gain system at Beaver Creek:

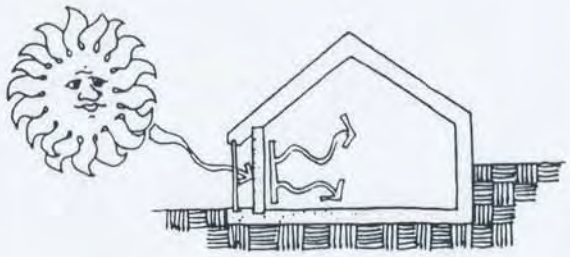
- The use of substantial south facing glazed areas as a means to heat a living space will be negated by heat loss through the glazing at night unless:
  1. The south glazing is double glazed, and night insulation is provided or,
  2. The south glazing is comprised of either 3 or 4 layers of glass.

  By increasing the square footage of the south facing glazed areas (night insulated or triple glazed), the percentage of the total heating load that can be handled by solar (solar savings fraction) is increased, providing that adequate thermal mass is provided.
- The required amount of thermal storage depends on the fraction of building heat supplied by solar. For small values of solar heating savings (less than 30%), solar heating contributes principally to offsetting daytime heating requirements and little solar need be or can be stored. For values above 30% solar savings, solar heat must be stored during the day for use at night. The thermal mass must be in sunlight all day, and if masonry is used, only the first 6" of thickness are effective. The amount of thermal storage mass is determined by one of the following formulas:
  1. Pounds of water required (per sq. ft. of south glazing) = 0.6 times the estimated solar savings percentage;
  2. Pounds of masonry required (per sq. ft. of south glazing) = 3 times the estimated solar savings percentage.

  If insufficient thermal mass is provided, high temperature fluctuations will result. During the daytime the living space will be uncomfortably warm, and later in the evening the thermal mass will too quickly radiate all its heat, resulting in cold temperatures later at night.
- Direct sunlight should be diffused over the masonry surface area by using translucent glazing material, by placing a number of small windows so that they admit sunlight in patches, or by reflecting direct sunlight off a light colored interior surface first, thus diffusing it throughout the space.
- Masonry floors should be a dark color. Masonry walls may be any color. Paint all lightweight construction a light color. Avoid direct sunlight on dark colored masonry surfaces for long periods of time. Do not use wall-to-wall carpet over masonry floors.
- Shade south facing glazing from summer sun.

Solar Design Guidelines

Thermal Storage Walls



The requirements for a Thermal Storage Wall system are south facing glazed areas for maximum winter solar gain and a thermal mass, located 4″ or more directly behind the glass, which serves for heat storage and distribution. The thermal mass wall may be concrete, masonry, or water. A masonry storage wall works by absorbing sunlight through the glazing onto its outer face, then transferring this heat through the wall by conduction and finally distributing this heat to the living space by radiation. The outside surface of the wall is usually painted a dark color for best possible absorption of sunlight.

The guidelines listed below should be followed when using a Thermal Storage Wall system at Beaver Creek:

- The glazed area in front of the thermal wall should, as a minimum, be double glazed.
- The efficiency of the Thermal Storage Wall system is largely determined by the wall's thickness and material. A space will overheat if more energy is transmitted through a thermal wall than is needed. This happens when a wall is either too thick or too thin. If a wall is too thick or not dark enough, it becomes inefficient as a heating source, since little energy is transmitted through it. The following are recommended material thicknesses:

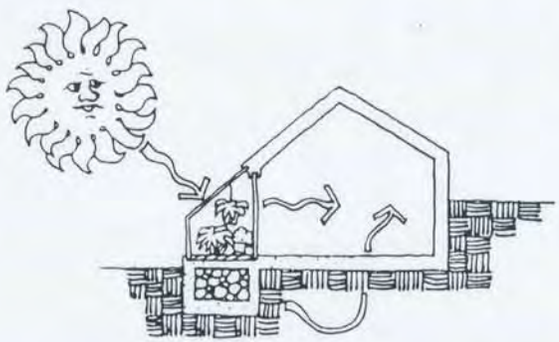
  Brick (common) - 8-14 inches
  Concrete (dense) - 12-18 inches
  Water - 6 or more inches

- The use of thermo-circulation vents, at the top and bottom of a masonry wall, are recommended only if the space to be heated will be used during the daytime. A residence would probably be better off saving the heat for radiation from the wall at night.
- The percentage of the total heating load in a Thermal Storage Wall system that can be handled by solar (solar savings fraction) increases when:
  1. Night insulation is used;
  2. Triple glazing is used in lieu of double glazing; or
  3. A special selective surface is added to the thermal mass wall which reduces the infrared radiation transmitted from the wall to the glass.

  For example, assuming a Thermal Storage Wall system has been designed for a house using double glazing, and the resulting solar savings fraction is 40%:
  1. Night insulation will increase the solar savings fraction to approximately 70%;
  2. Triple glazing will increase it to approximately 50%; or
  3. A special selective coating could increase it to approximately 55%-60%.

Solar Design Guidelines

Attached Sunspaces



Attached Sunspaces, or greenhouses, combine the elements of a Direct Gain system with those of a Thermal Storage Wall system. A well designed south facing solar greenhouse can collect enough thermal energy to heat not only itself, but also a significant part of the building to which it is attached.

The Attached Sunspace system is comprised of two thermal zones, accepting fairly large temperature swings in one zone in order to stabilize temperature in the other zone. In the first zone, which is a Direct Gain sunspace, large temperature swings can be expected because there is a large excess of heat. Heat storage is in the thermal mass wall separating the zones and in the floor of the first zone. Large temperature swings in the first zone can be completely acceptable if it is used as a greenhouse, a sun room, an atrium, a transit area, or a vestibule. The second zone, which is the primary living space, is therefore a buffered space, protected from the extremes of the first zone by the time delay and heat capacity effects of the thermal mass wall. A rock bed may be added to this system by actively taking heat from the greenhouse during the day and storing it in the building for use at night. Warm air taken from the greenhouse by fan is stored underneath the living space floor slab. This rock bed then radiates heat up through the floor of the living space.

The guidelines listed below should be followed when using an Attached Sunspace system at Beaver Creek:

- The sunspace (greenhouse) should be double-glazed.
- The recommended thermal mass wall thicknesses are:

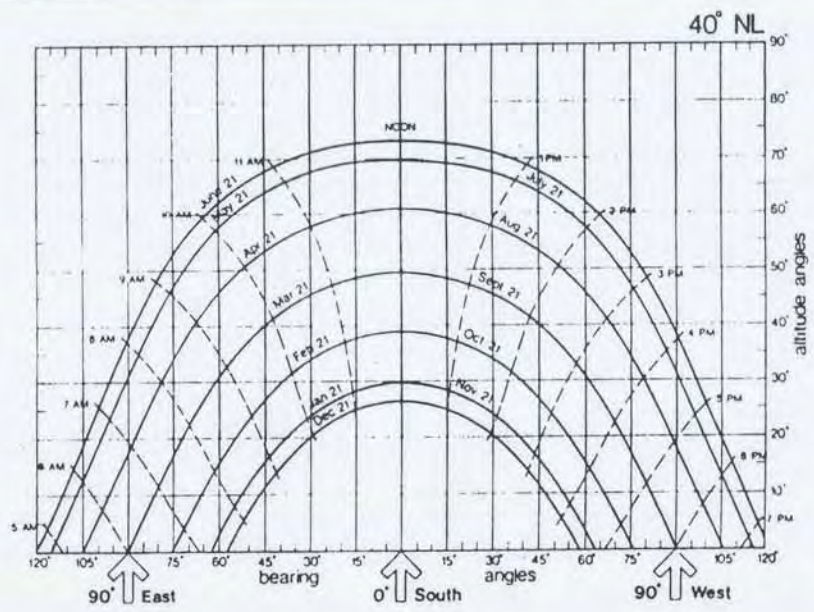
Brick	- 10-14 inches
Concrete	- 12-18 inches
Water	- 8 or more inches

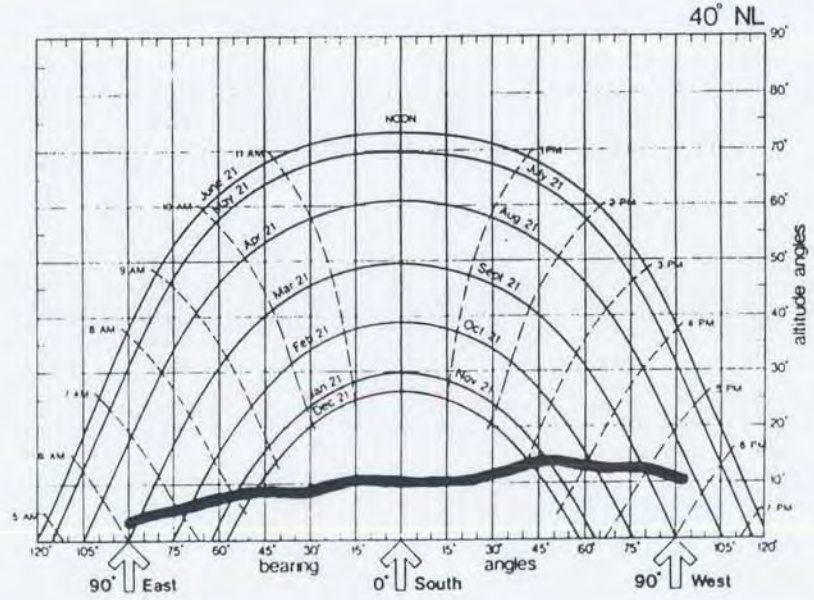
- The wall surface should be a medium or dark color.
- The addition of thermal mass located in the sunspace, such as water filled drums, will reduce the temperature fluctuations within the sunspace.
- A rock bed with fan forced air should be added to the system only if:
  1. The temperatures achieved in the sunspace are appreciably higher than the desired temperature level in the living areas, and
  2. There is excess heat in the sunspace.

  Design a complete fan forced air circuit by returning the air to the sunspace after it has heated the rock bed. Lay out the rock beds with their inlet and exit plenums in such a way that all rock has air flowing through it. Use backdraft dampers to prevent reverse thermocirculation at night.

Solar Design Guidelines

Sun Charts





In order to understand and be responsive to the effects of the sun on the location and design of places, it is necessary to know, at any given moment, the sun's position in the sky. This information is necessary in order to calculate solar heat gain, and to locate buildings, outdoor spaces, interior room arrangements, windows, shading devices, vegetation and solar collectors. The Cylindrical Sun Chart on the left provides an easy to understand and convenient way to predict the sun's movement across the sky for 40° north latitude (which is Beaver Creek's approximate latitude).

This chart enables one to estimate the position of the sun at any time of the day for any day of the year. For instance, on December 21 at 11 a.m. the sun will be 25° above the horizontal horizon and 15° east of due south.

To accurately determine the times that direct sun is blocked from reaching any point on the site it is necessary to plot the obstructions as seen from that point. This is done by plotting the skyline directly on the sun chart by means of either a transit or a compass and a hand level. A hypothetical skyline has been plotted on the sun chart on the left showing that the area above the plotted line is the time when the sun will reach the site.

Solar Design Guidelines

Summary

The ultimate solar design challenge is the use of passive and/or active solar techniques within the Beaver Creek Design Theme presented in another section of this manual. All too often solar buildings are designed which both ignore the ambiance and human scale of exterior spaces adjacent to the building, as well as turn their back on both the existing man-made and natural environmental contexts. The goal at Beaver Creek is to create a new environment of buildings and places that will grow old gracefully and achieve a special timeless quality, without exploiting our natural resources. Through innovative and responsive design with solar energy, this goal can be achieved.

Bibliography

A substantial portion of this section on Solar Guidelines has been synthesized from two books. The first is *The Passive Solar Energy Book (1979) by Edward Mazria*. This book on passive solar energy is highly recommended to anyone who decides to pursue passive solar design techniques. The second book, an even more precise analysis of passive solar design, is *The Passive Solar Design Handbook, Volume Two of Two Volumes; Passive Solar Design Analysis (1980), prepared by Douglas Balcomb for the U.S. Department of Energy*.

Rental Condominium Regulations

Condominium Regulations	Condominiums shall be classified as either "second home" or "rental". If the condominium is intended to be used for rental purposes, it must comply with the following condominium regulations in addition to the appropriate architectural regulations for the location and type of building. "Second home" condominiums are not required to comply with the rental condominium regulations, although it is strongly recommended that they be given consideration in making design decisions. If an owner of a "second home" condominium wants to rent his condominium at a later time, that condominium must conform with the rental condominium regulations. All rental condominiums shall meet the regulations for either Type A, Type B or Type C condominiums. These stand for the usual three classifications of room types: good (C), better (B), and best (A). The Chart that follows lists the requirements that must be met to qualify a unit as a Type A, Type B or Type C unit. It should be understood that these are regulations; however the Design Review Board may decide in specific instances to vary their application. Each condominium, however, must substantially meet these regulations. A conformance to at least 90% of the appropriate specifications is expected in all cases. The basic purpose of the Rental Condominium Regulations is to provide a standard of quality for rental lodging in Beaver Creek. This is especially important for units which	will be part of a rental pool or used for group and conference lodging.

‹e. Condominium Regulations – Classification Requirements

' ıEA	TYPE A	TYPE B	TYPE C
General	• Appliances: brand name. • Numbering: logical sequence; lighted, if outdoor. Lockoff; alphabetically designated. • Directional signs: where necessary. • Hot water heaters: sized to accommodate full occupancy. • Maintenance: central vacuum system (100% coverage). • Directionals signifying specific addresses. • Covered bus stop shelter if on bus route.	• Appliances: brand name. • Numbering: logical sequence; lighted, if outdoor. Lockoff: alphabetically designated. • Directional signs: where necessary. • Hot water heaters: sized to accommodate full occupancy. • Directionals signifying specific addresses. • Covered bus stop shelter if on bus route.	• Appliances: brand name. • Numbering: logical sequence; lighted, if outdoor. Lockoff: alphabetically designated. • Directional signs: where necessary. • Hot water heaters: sized to accommodate full occupancy. • Directionals signifying specific addresses. • Covered bus stop shelter if on bus route.
Lockoff Rooms *A lockoff room is one which has a separate entry from the remainder of the condominium, allowing it to be used as a bedroom of the condominium or as a separate unit*	50% of all units must have at least one lockoff. • Must meet master bedroom requirements • 400 SF minimum and 14′ minimum width • Separate, lighted entry from outside the unit with peephole. • Double doors with dead bolt on each side. • Interior door leading to balance of unit. • Outside door differently keyed than main entry (same master key). • Hotel hardware type of locks, preferably dead bolt and chain locks, for all entry doors. • 1 telephone that connects to main switchboard with	50% of all units must have at least one lockoff. Either master bedroom or other of equal requirements. 360 SF minimum. • Separate lighted entry from outside of the unit with peephole. • Double doors with dead bolt on each side. • Interior door leading to balance of unit. • Outside door differently keyed than main entry (same master key). • Hotel hardware type of locks, preferably dead bolt and chain locks, for all entry doors. • 1 telephone that connects to main switchboard with message waiting lights.	50% of all units must have at least one lockoff. Either master bedroom or other of equal requirements. 325 SF minimum. • Separate lighted entry from outside of the unit with peephole. • Double doors with dead bolt on each side. • Interior door leading to balance of unit. • Outside door differently keyed than main entry (same master key). • Hotel hardware type of locks, preferably dead bolt and chain locks, for all entry doors. • 1 telephone that connects to main switchboard with message waiting lights.

Rental Condominium Regulations – Classification Requirements

AREA	TYPE A	TYPE B	TYPE C
Lockoff Rooms (continued)	message waiting lights. • 1 T.V. (minimum 19" color). • Separate heating and air handling zone with thermostat. • Wall switch for exterior door light. • Security locks separate from remainder of unit. • King size bed or 2 doubles. • Full length mirror, robe hooks on back of bath door.	• 1 T.V. (minimum 19" color). • Separate heating and air handling zone with thermostat. • Wall switch for exterior door light. • Security locks. • King size bed or 2 doubles. • Full length mirror, robe hooks on back of bath door.	• 1 T.V. (minimum 19" color). • Separate heating and air handling zone with thermostat. • Wall switch for exterior door light. • Security locks. • King size bed or 2 doubles. • Full length mirror, robe hooks on back of bath door.
Kitchen	Fully equipped, including but not limited to the following or equivalent: • Refrigerator-freezer with automatic ice maker. • Vented four burner range and self cleaning oven. • Microwave oven. • Dishwasher. • Double sink with disposal unit. • Ample kitchen cabinets. • At least 3 duplex electrical outlets at counter level.	Fully equipped, including but not limited to the following or equivalent: • Refrigerator-freezer with automatic ice maker. • Vented four burner range and self cleaning oven. • Dishwasher. • Double sink with disposal unit. • Ample kitchen cabinets. • At least 3 duplex electrical outlets at counter level.	Fully equipped, including but not limited to the following or equivalent: • Refrigerator-freezer. • Vented four burner range and self cleaning oven. • Dishwasher. • Double sink with disposal unit. • Ample kitchen cabinets. • At least 3 duplex electrical outlets at counter level.
Dining/Living Room	360 SF for a two bedroom unit, plus 100 SF for each additional bedroom. • Dimmer switch for light fixture over dining room table. • At least 5 duplex electrical outlets. • 1 telephone that connects to main switchboard with message waiting lights. • 1 T.V. (minimum 19" color).	330 SF for a two bedroom unit, plus 75 SF for each additional bedroom. • Dimmer switch for light fixture over dining room table. • At least 5 duplex electrical outlets. • 1 telephone that connects to main switchboard with message waiting lights. • 1 T.V. (minimum 19" color).	330 SF for a two bedroom unit, plus 75 SF for each additional bedroom. • At least 5 duplex electrical outlets. • 1 telephone that connects to main switchboard with message waiting lights. • 1 T.V. (minimum 19" color).

Re ,tal Condominium Regulations – Classification Requirements

AREA	TYPE A	TYPE B	TYPE C
Master Bedroom/Bath	400 SF with a minimum 14′ width. • At least 4 duplex electrical outlets. • 1 T.V. (minimum 19″ color). • 1 telephone that connects to main switchboard with message waiting lights. • Wall switch activating 2 of the duplex outlets. • Storage for four suitcases. A dressing room area which includes but is not limited to the following: • Closet space for 4, at least 8′ long. • Vanity counter; lighted vanity mirror. • Double sink. • 1 duplex electrical outlet. • Built-in tissue dispenser. A tub/shower and toilet area which includes but is not limited to the following: • Shower/tub with high quality shower curtain. • 1 duplex electrical outlet. • Toilet, high quality. • Tissue dispenser. • Equipped with exhaust fan and heating lamp, away from door swing. • Ceramic tile around tub/shower. • No fiberglass showers/tubs. • Grab bars for shower/tub.	360 SF with a minimum 13′ width. • At least 3 duplex electrical outlets. • 1 T.V. (minimum 19″ color). • 1 telephone that connects to main switchboard with message waiting lights. • Wall switch activating 2 of the duplex outlets. • Storage for four suitcases. A dressing room area which includes but is not limited to the following: • Closet space for 4, at least 6′ long. • Vanity counter; lighted vanity, mirror, wash sink. • 1 duplex electrical outlet. • Built-in tissue dispenser. A tub/shower and toilet area which includes but is not limited to the following: • Shower/tub with high quality shower curtain. • 1 duplex electrical outlet. • Toilet, high quality. • Tissue dispenser. • Equipped with exhaust fan and heating lamp, away from door swing. • Ceramic tile around tub and shower. • No fiberglass showers/tubs. • Grab bars for shower/tub.	300 SF with a minimum 12′ width. • At least 3 duplex electrical outlets. • 1 T.V. (minimum 19″ color). • 1 telephone that connects to main switchboard with message waiting lights. • Wall switch activating 1 of the duplex outlets. • Storage for four suitcases. A dressing room area which includes but is not limited to the following: • Closet space for 3, at least 6′ long. • Vanity counter; lighted vanity mirror, wash sink. • 1 duplex electrical outlet. • Built-in tissue dispenser. A tub/shower and toilet area which includes but is not limited to the following: • Shower/tub with high quality shower curtain. • 1 duplex electrical outlet. • Toilet, high quality. • Tissue dispenser. • Equipped with exhaust fan and heating lamp, away from door swing. • Ceramic tile around tub and shower. • No fiberglass showers/tubs. • Grab bars for shower/tub.

Rental Condominium Regulations – Classification Requirements

AREA	TYPE A	TYPE B	TYPE C
Sound Transmission	Minimum sound transmission between units, between units and common areas, and for bedroom walls: STC rating of 55.	Minimum sound transmission between units, between units and common areas, and for bedroom walls: STC rating of 55.	Minimum sound transmission between units, between units and common areas, and for bedroom walls: STC rating of 55.
Storage	Storage locker sufficient to store skis and athletic equipment.	Storage locker sufficient to store skis and athletic equipment.	Storage locker sufficient to store skis and athletic equipment.
Owner Closet	In logical location, a closet for owner to store belongings.	In logical location, a closet for owner to store belongings.	In logical location, a closet for owner to store belongings.
Entry Foyer	Coat closet of 2 feet depth and 3 feet width. • Entry door equipped with security lock. • Peepholes and chain locks.	Coat closet of 2 feet depth and 3 feet width. • Entry door equipped with security lock. • Peepholes and chain locks.	Coat closet of 2 feet depth and 3 feet width. • Entry door equipped with security lock. • Peepholes and chain locks.
Landscaping	• Planter areas close to units. • Trees and ground cover indigenous to Beaver Creek. • Irrigation system: automatic with pop-up sprinkler heads. • Decorative lighting: automatically controlled.	• Trees and ground cover indigenous to Beaver Creek. • Irrigation system: automatic with pop-up sprinkler heads. • Decorative lighting: automatically controlled.	• Trees and ground cover indigenous to Beaver Creek. • Irrigation system: automatic with pop-up sprinkler heads. • Decorative lighting: automatically controlled.
Utilities	• Each unit separately metered. • Central security/communication system panel. • Conduit of adequate sizing for communication system.	• Each unit separately metered. • Central security/communication system panel. • Conduit of adequate sizing for communication system.	• Each unit separately metered. • Central security/communication system panel. • Conduit of adequate sizing for communication system.

Rental Condominium Regulations – Classification Requirements

AREA	TYPE A	TYPE B	TYPE C
Utility Room	Washer, dryers, counter and cabinets. • Washer and dryer in utility closet and central laundry room sufficient to serve 50% of units.	Washer, dryer in utility closet and central laundry room sufficient to serve 50% of units.	Central laundry room sufficient to serve all units.
Common Areas	A multi-purpose room: • 24 SF per unit. • Fully equipped kitchen with cabinets. • Store room for chairs and tables. • Men's and women's restrooms accessible to guests.	A multi-purpose room: • 20 SF per unit. • Store room for chairs and tables. • Men's and women's restrooms accessible to guests.	A multi-purpose room: • 20 SF per unit. • Store room for chairs and tables. • Men's and women's restrooms accessible to guests.
	A housekeeping services room located near elevator: • 450 SF and 3 SF for each bedroom over 100.	A housekeeping services room located near elevator: • 450 SF and 3 SF for each bedroom over 100.	A housekeeping services room located near elevator: • 450 SF and 3 SF for each bedroom over 100.
	An open storage area to hold 1 cord of wood for every 2 fireplaces with gate access from parking area.	An open storage area to hold 1 cord of wood for every 2 fireplaces with gate access from parking area.	An open storage area to hold 1 cord of wood for every 2 fireplaces with gate access from parking area.
	A room to house icemaking machine and 3 vending machines	A room to house icemaking machine and 3 vending machines.	A room to house icemaking machine and 3 vending machines.
	A small office (120 SF) located at entry. • Counter opening to lounge.	A small office (120 SF) located at entry: • Counter opening to lounge.	A small office (120 SF) located at entry: • Counter opening to lounge.

Rental Condominium Regulations – Classification Requirements

AREA	TYPE A	TYPE B	TYPE C
Common Areas (continued)	• Office equipped: storage closet, telephone outlet, communication system panel, 4 duplex electrical outlets. • Glass door, bulletin board. Front desk space: (depending on number of rooms) • 200/300 SF • Safety deposit boxes • Switchboard • Prominent location One men's and one women's employee toilet. A maintenance service room (300 SF) equipped with 110, 200/440 electrical.	• Office equipped: storage closet, telephone outlet, communication system panel, 4 duplex electrical outlets. • Glass door, bulletin board. Front desk space: (depending on number of rooms) • 200/300 SF • Safety deposit boxes • Switchboard • Prominent location One men's and one women's employee toilet. A maintenance service room (300 SF) equipped with 110, 200/440 electrical.	• Office equipped: storage closet, telephone outlet, communication system panel, 4 duplex electrical outlets. • Glass door, bulletin board. Front desk space: (depending on number of rooms) • 200/300 SF • Safety deposit boxes • Switchboard • Prominent location One men's and one women's employee toilet. A maintenance service room (300 SF) equipped with 110, 200/440 electrical.
Corridors	Illuminated to an average of 20 foot candles. • Lighting: decorative and subtle. • Fixtures: low maintenance type. • Corridors fully carpeted. • Duplex electrical outlets every 50 lineal feet. • Corridor electrical common area metered. • Trash and linen chutes (lockable) conveniently located on each floor.	Illuminated to an average of 20 foot candles. • Lighting: decorative and subtle. • Fixtures: low maintenance type. • Corridors fully carpeted. • Duplex electrical outlets every 50 lineal feet. • Corridor electrical common area metered. • Trash and linen chutes (lockable) conveniently located on each floor.	Illuminated to an average of 20 foot candles. • Lighting: decorative and subtle. • Fixtures: low maintenance type. • Corridors fully carpeted. • Duplex electrical outlets every 50 lineal feet. • Corridor electrical common area metered. • Trash and linen chutes (lockable) conveniently located on each floor.

Rental Condominium Regulations - Classification Requirements

AREA	TYPE A	TYPE B	TYPE C
Elevators	Buildings with more than two residential floors shall have an elevator.	Buildings with more than two residential floors shall have an elevator.	Buildings with more than two residential floors shall have an elevator.
Jacuzzi / Sauna	• Jacuzzi and sauna areas shall be combined and enclosed within the building. • A shower and space for hanging towels and clothes shall be provided. • Jacuzzi and sauna large enough to hold 12 adults. • A few small lockers where valuables can be locked up.	• Jacuzzi and sauna areas shall be combined and enclosed within the building. • A shower and space for hanging towels and clothes shall be provided. • Jacuzzi and sauna large enough to hold 12 adults. • A few small lockers where valuables can be locked up.	• Jacuzzi and sauna areas shall be combined and enclosed within the building. • A shower and space for hanging towels and clothes shall be provided. • Jacuzzi and sauna large enough to hold 12 adults. • A few small lockers where valuables can be locked up.

Telecommunication System Regulations

The Telecommunication System Regulations are published in the "Manual for Telecommunication System Regulation". The Design Review Board has adopted these Regulations. Such Regulations are available on request from the Beaver Creek Resort Company. All buildings must comply with such Regulations.

Fire and Life Safety Rules and Regulations

The Fire and Life Safety Rules and Regulations are published by the Beaver Creek Metropolitan District. The Design Review Board has adopted these Rules and Regulations. Such Fire and Life Safety Rules and Regulations are available on request from the Beaver Creek Metropolitan District. All buildings must comply with such Rules and Regulations.

Construction Regulations

Construction shall not begin until Final Plan approvals have been issued by the Design Review Board, and a building permit has been obtained from Eagle County. Once begun, construction must be completed with expedition, strictly in accordance with the approved Final Plan. A Certificate of Occupancy will be issued by Eagle County after completion of all construction, including landscaping.

Building Permits

Upon Design Review Board approval of final plans, a building permit must be obtained from Eagle County prior to commencement of construction.

Excavation and Grading

Extreme care must be taken during excavation to assure that trees not authorized for removal are not damaged. Also brush, surplus soil, and other excavated debris must promptly be removed from the building site. Blowing dust from grading must be controlled by watering.

Noise

Although construction hours will not be controlled, loud noise such as heavy equipment operation is prohibited between 6:00 p.m. and 7:00 a.m.

Protection of Property

All construction activity shall be contained on the lot for which a building permit has been issued unless specific authorization is received in writing from the Design Review Board. Access to the lot shall be only from the approved road adjoining the site. Any common ground, adjacent lots or roads damaged during construction shall be promptly restored to their original condition to the satisfaction of the Design Review Board. If restoration is not accomplished by the end of the growing season following completion of construction, all required repairs will be performed by the Beaver Creek Resort Company with all costs thereof charged to the person in whose name the building permit was issued.

Construction Signs

One construction sign will be allowed for each project. The sign shall not exceed 25 square feet overall, and shall be located within the project boundary visible from an adjacent roadway or entry to the project. The sign must conform to the layout shown below with only the name, address and telephone number of the developer, architect, contractor, lender and sales agent allowed along with the project name, logo and location (Tract, Block, Lot). All parties listed must be shown in uniform type style, size and color.

All construction signs must be approved by the Design Review Board prior to installation. Layout for the sign must be submitted to the Design Review Board 10 days prior to a scheduled meeting.

Signs with the intended use of selling property are prohibited. No other signs may be displayed on the property without written approval of the Design Review Board.

PROJECT LOGO AND/OR NAME
Tract ____ Block ____ Lot ____

DEVELOPER	NAME/ADDRESS/PHONE #
ARCHITECT	NAME/ADDRESS/PHONE #
CONTRACTOR	NAME/ADDRESS/PHONE #
LENDER	NAME/ADDRESS/PHONE #
SALES AGENT	NAME/ADDRESS/PHONE #

Construction Regulations

Temporary Structures	A small job office may be maintained on the site. Temporary living quarters for workmen or the owner will not be permitted. The job office shall be removed within 30 days after completion of the permanent building.
Tree Removal	No trees over 3" diameter one foot above grade will be removed without prior approval by the Design Review Board. After staking of homesite, driveway, parking areas, patios, etc., it is the obligation of the owner to notify the Design Review Board for an appointment to inspect the site (see item *Inspections*)
Water Connection and Toilets	Permanent water connection and temporary enclosed chemical toilets must be available during all of construction. Chemical toilets should, if possible, be screened from view and be located away from neighbors.
Blasting Restrictions	Blasting must be done between the hours of 9:00 a.m. and 6:00 p.m. with prior notification to Beaver Creek Security.
Inspections	In addition to the building inspections required by the Eagle County Building Department, the following inspections must be scheduled with the Design Review Board: 1. Site Inspection - location of lot survey point, driveway location, building corners, cut and fill areas, and protected vegetation. This inspection must be completed prior to start of construction; 2. Framing Inspection - prior to enclosure of exterior walls or roof; 3. Final Inspection - prior to Certificate of Occupancy issued by Eagle County
Erosion and Sediment Control	During construction, erosion shall be minimized through proper soil stabilization, water control and timely revegetation. The contractor shall implement all control techniques outlined in the owner/developer's approved Erosion Control and Revegetation Plan.

Design Regulations Checklist

Architecture, Site Plan, Landscape

	YES	NO
Is the project congruent with the Beaver Creek Theme?		
Have all appropriate codes and regulations been adhered to?		
Has the project been designed for a 100 pound snow load and a 35 pound wind load?		
Is the heating system(s) designed for between 9,500 and 10,000 degree days?		
Are major meeting spaces cooled and vented adequately?		
Have the required building setbacks been adhered to?		
Do the voids between buildings provide interesting pedestrian scale places and pathways?		
Are major roof forms limited to gable and hip roofs?		
Are major roof slopes not less than 6:12 and not greater than 12:12?		
Are pedestrian and vehicular areas below roofs protected from shedding snow and dripping water?		
Has a cold roof assembly been provided?		
Is the roof material a flat profile unglazed tile in a weathered surface?		
Are the exterior wall materials either cedar, redwood, plaster, or rock approved by the Design Review Board?		
Do plaster and rock exterior walls express mass rather than veneer?		
Is the plaster finish specified correctly?		
Are windows located in a random pattern rather than in a symmetrical, repetitious or formal pattern?		
Are all window casings natural, stained, painted or clad?		
Are windows used in combinations to avoid large uninterrupted glass areas of more than 20 square feet?		
Do fences or walls (free standing or retaining walls) conform with the materials, colors, textures and forms of adjacent buildings?		

Design Regulations Checklist

		YES	NO
Architecture, Site Plan, Landscape (continued)	Are foundation walls covered with either earth, wood, plaster or rock, or not left exposed for more than 8″ in a vertical direction?		
	Does the finish grading of the site blend into the natural landscape which borders it?		
	Is the slope of finish grading always less than a 2 (horizontal): 1 (vertical) slope?		
	Is the building height less than 55 feet for The Village (Tract A) and less than 35 feet for commercial, service, recreational and multi-family residences?		
	Are roofs insulated to a minimum of R-30?		
	Are walls insulated to a minimum of R-19?		
	Are perimeters of concrete slabs insulated to a minimum of R-12?		
	Are all openings in exterior walls caulked and weatherstripped?		
	Are all windows double or triple glazed?		
	Is the service and trash removal area(s) for the project protected from public view with walls, fences or berms?		
	Are these walls or fences constructed of building materials compatible with the materials and forms of the building?		
	Is the access to the service and trash removal area(s) such that it does not conflict with pedestrian circulation?		
	Is the paving material for patios and decks adjacent to the pedestrian street similar to, and compatible with, the pedestrian street material in both color and size?		
	Do tree, shrub, vine and ground cover types conform to the specified list?		
	Is landscaping harmonious with natural surroundings?		
	Are the number of fireplaces within the allocation permitted by the Design Review Board?		
	Does each fireplace have a flue temperature sensor device and an indicator light?		
	Do fireplaces have glass doors and outside combustion air supply?		

Design Regulations Checklist

		YES	NO
Architecture, Site Plan, Landscape (continued)	Are chimneys and flues located so as not to cause fumigation of ground level areas or adjacent buildings during down wind conditions?		
	Are all outdoor utility tanks, metering devices, transformers and other similar devices concealed from the view of public spaces and neighboring properties?		
	Are all utilities underground?		
	Is all runoff drainage prevented from crossing neighboring property lines?		
	Do driveway slopes not exceed 5% for the first 20 feet from the roadway and not exceed 10% elsewhere?		
	Are driveway surfaces the required material?		
	Are adequate parking spaces provided?		
	Are all newly graded non-paved areas revegetated so that they blend in naturally with existing native vegetation?		
	Does landscaping blend with landscaping of adjacent properties?		
	Is exterior lighting installed such that there is no glare to either neighboring properties or pedestrian or vehicular traffic?		
	Has an Erosion Control and Revegetation Plan been prepared to deal with water runoff, slope stabilization, and revegetation measures?		
Commercial Space	Is the retail space storefront congruent with Beaver Creek Theme?		
	Are window openings in proportion with the scale of the building?		
	Are storefront doors recessed so that they do not project beyond the face of the storefront when in an open position?		
	Are exterior furnishings and art work used?		
	Are bay windows, canvas awnings or other imaginative devices used in the storefront design?		
	Are tenant identification signs interesting, colorful and tastefully designed?		

Design Regulations Checklist

		YES	NO
· Commercial Space (continued)	Do signs, whether lighted or unlighted utilize the contrasting background?	_____	_____
	Do signs comply with the Design Regulations?	_____	_____
	Are the sizes of signs in compliance with the regulations?	_____	_____
	Do projecting signs provide at least 7'6" clear height above the walkway?	_____	_____
	Do the graphics, artwork and color comply with the Design Regulation?	_____	_____
	Is lighting provided in the window display area?	_____	_____
	Does the lighting comply with the requirements?	_____	_____
Solar	Have passive or active solar systems been applied to the project design?	_____	_____
	Have the use of solar techniques been implemented within the context of Beaver Creek Design Theme?	_____	_____
ⁱental Condominiums	Do all condominiums meet the requirements for either Type A, Type B, or Type C condominiums?	_____	_____
elecommunication System	Have all appropriate codes and regulations been adhered to?	_____	_____
ıre and Life Safety	Have all appropriate codes and regulations been adhered to?	_____	_____

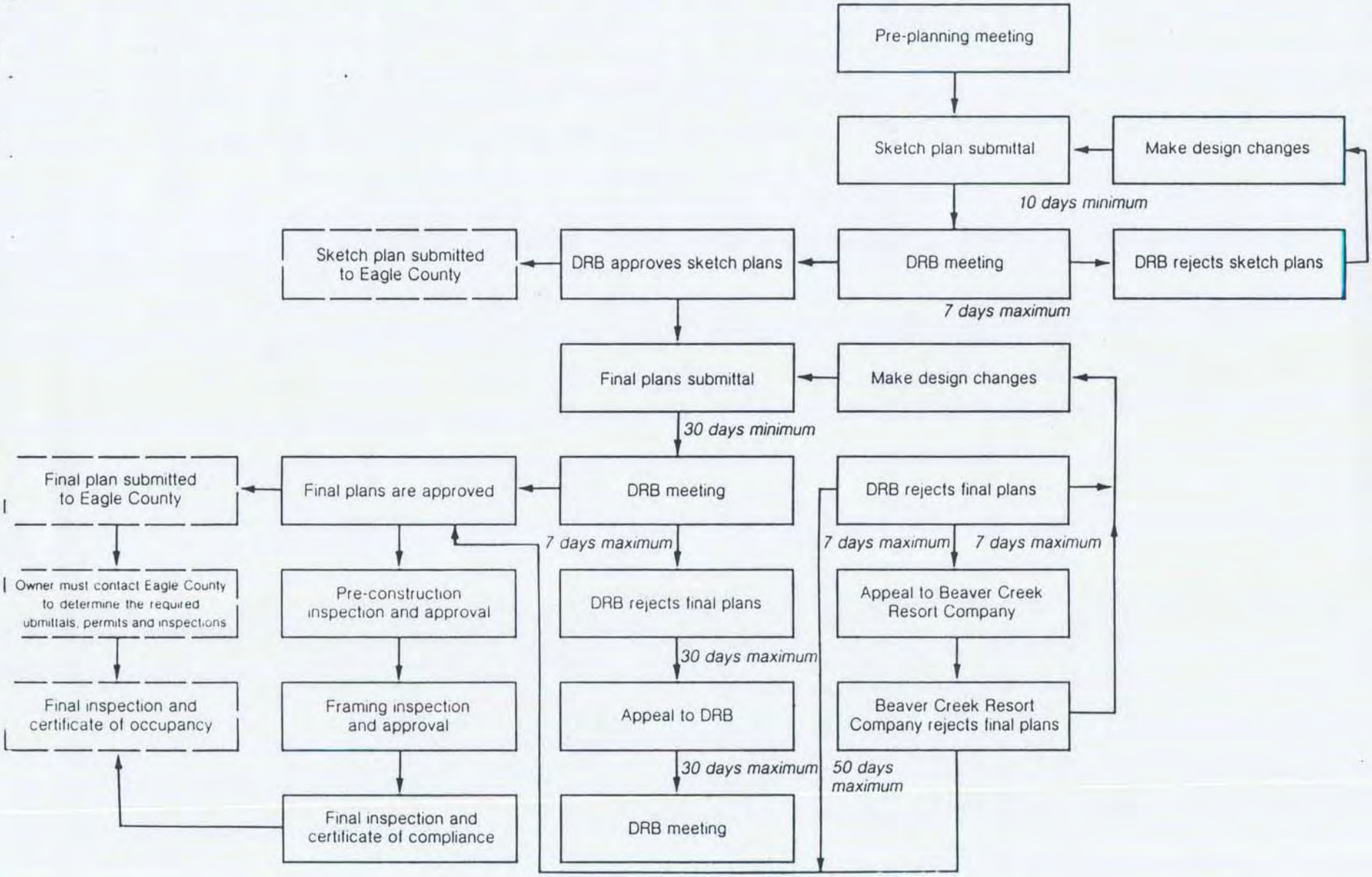
Design Review and Development Process

This section provides a "roadmap" that will guide an owner through the review and approval process of the Design Review Board (hereinafter referred to as "DRB"). This process must be followed for any of the following:

- The construction of a new building;
- The renovation, expansion or refinishing of the exterior of an existing structure;
- Major landscape changes to a site.

The Owner must also meet the submittal and approval requirements of Eagle County in order to obtain a Building Permit. Precise submittal requirements may be obtained from the Eagle County Building Department.

Design Review and Development Process Outline



Design Review and Development Process Detailed Requirements

STEP	RESPONSIBILITY	TIMING
Pre-Planning Meeting		
1. Provide the owner, architect, or builder with introductory information which will establish the overall regulations for the particular site or area involved. This meeting will address: • Property boundaries • Easements and utilities • Setbacks • Architectural theme and special design considerations • Building program and design rationale	DRB Staff	Upon request
Sketch Plan Review		
1. Prepare and submit to the DRB four copies of the Sketch Plan which would include: • A conceptual description of the site plan, floor plans, elevations, roof design, exterior materials, character of the proposed structure, and landscape plans to include existing vegetation, temporary revegetation specifications for reseeding and mulching, and initial drainage and erosion control measures. • Scale: Minimum of 1″=20′ for site and landscape plans is required; 1/16″, 1/8″, or 1/4″ = 1′0″ are optional for floor and elevation plans. • Submit document verifying that the building height is in accordance with the Supplemental Declarations pertaining to this lot. • Square footage breakdown for commercial, service, recreation and residential area.	Owner	At least 10 days before the next scheduled meeting of the DRB
2. DRB reviews Sketch Plan and notifies owner in writing of its findings.	DRB	Within 7 days of DRB meeting
3. Owner may resubmit a Sketch Plan if findings are negative.	Owner	Open
4. Submit approved Sketch Plan to Eagle County Building Department.	Owner	Open

Design Review and Development Process Detailed Requirements

STEP	RESPONSIBILITY	TIMING
Final Plan Review		
1. Submit to the DRB four copies of the Final Plan that reflect the design of the proposed building, landscape, or signage proposal. (It is strongly recommended that building and landscape plans be prepared by licensed consultants.) A final plan must include the following information: • Site Plan (Presented at 1″ = 20′, 1″ = 16′, 1″ = 10′, or 1″ = 8′.) Indicate proposed building "footprint", roof drip line, property boundaries and easements, utility locations, existing vegetation, existing and proposed 1′ contours, areas of cut and fill, drainage, proposed roads, driveways, sidewalks, decks, and any other proposed improvements. Indicate scale and north direction. • Footing and Foundation Plan (Presented at ⅛″ or ¼″ = 1′0″.) • Floor Plans (Presented at ⅛″ or ¼″ = 1′0″.) Include all room dimensions, door and window locations and sizes, and location of mechanical and electrical systems. Square footage breakdown for commercial, service, recreation and residential area. • Elevations Indicate the exterior appearance of all views labeled in accordance with the Site Plan; height of chimney as compared with the ridge of the roof; natural and finished grade for elevations of all views. Describe all exterior materials, colors, and finishes (walls, roofs, trim, chimneys, windows, doors, etc.). The elevation drawings should indicate shadow patterns and material textures. • Building Sections (Presented at ⅛″ or ¼″ = 1′0″.) Indicate building walls, floors, interior relationships, finished exterior grade and any other information to clearly describe the interior/exterior relationships of the building.	Owner	At least 10 days before the next scheduled meeting of the DRB

Design Review and Development Process Detailed Requirements

STEP	RESPONSIBILITY	TIMING
Final Plan Review (continued)		
• Perspective Sketches Provide a ground level perspective sketch(s) of the building from a location(s) representing a primary public exposure to the building. This sketch should indicate exterior shadow patterns, materials, textures, and trim details.		
• Model (Presented at 1/16″, 1/8″ or 1/4″ = 1′0″.) Indicate three-dimensional building massing, form, openings, and relationship to the surrounding site.		
• Details Provide design details to sufficiently represent the visual expression of the building, exposed connections, and material interfaces.		
• Exterior Finish Samples Provide a sample of exterior finishes showing color and texture of plaster, type of rock, and color and pattern of wood		
• Diagrams Indicate areas of snow shedding and water removal, and anticipated chimney smoke dispersal.		
• Landscape Plan (Presented at 1″ = 20′, 1″ = 16′, 1″ = 10′ or 1″ = 8′.) Indicate final landscape improvements to include: • Proposed grading plan with spot elevations at 1′ contours for drainage control and rim and invert elevations for all drains and culverts; • Planting plan with proposed plant materials; • All plant materials by common and botanical names and size; • For seeded areas, rates and method of application per 1,000 square foot increments, mulch type, rate and stabilization technique and fertilizer type and time of application are required for review; • Locate rock out-croppings, decks or patios, service yards, driveways, other freestanding structures, etc.; • Locate and detail all outdoor lights and signs.		

Design Review and Development Process Detailed Requirements

STEP	RESPONSIBILITY	TIMING
Final Plan Review (continued) • Specifications Provide written specifications and color boards where necessary for the following items: • Exterior wall materials and colors; • Windows and exterior doors with colors; • Exterior trim materials and colors; • Fireplace; • Exterior lighting fixtures; • Insulation and heat loss specifications with supporting calculations. • Erosion Control and Revegetation Plan Indicate the means and time schedule by which the prevention of erosion and stream sedimentation will be addressed during and after construction, including any of the following that are appropriate for the site in question: • Tree and vegetation protection; • Placement and type of perimeter filters; • Water control methods; • Vehicular access points; • Spoil storage and stabilization measures; • Siltation control devices; • Landscaping methods; • Seed and fertilizer types, application rates and methods; • Mulch type, rate of application and stabilization methods; • Type and location of any permanent or temporary irrigation to be used.		

Design Review and Development Process Detailed Requirements

STEP	RESPONSIBILITY	TIMING
Final Plan Review (continued)		
2. Notify applicant and Beaver Creek Resort Company of the DRB decision. Notification will also be posted in a conspicuous place at Beaver Creek. The decision will become final if no action is taken by the Beaver Creek Resort Company Board of Directors and no appeal is filed by applicant within 30 days of DRB decision.	DRB	Within 10 days of the meeting
Design Review Board Appeal Process		
1. Submit an appeal to the DRB in writing.	Applicant	Within 30 days following DRB decision
2. Review applicant's appeal and render a decision.	DRB	Next regularly scheduled meeting
3. Transmit decision to applicant and to Beaver Creek Resort Company Board of Directors. Public notice will also be completed.	DRB	Within 7 days of the decision regarding appeal request
Beaver Creek Resort Company Appeal Process		
1. Submit a formal appeal to the Beaver Creek Resort Company Board of Directors	Applicant	Within 7 days following the date of notice of DRB appeal decision
2. Review applicant's appeal. • Failure of Beaver Creek Resort Company to act within 50 days from date of appeal filing will constitute approval. • Beaver Creek Resort Company will document in writing reasons for disapproval.	Beaver Creek Resort Company	Within 30 days from the date of filing the appeal (A 20-day extension may be provided if further information is needed.)
3. Submit approved Final Plan (at whatever stage) to Eagle County Building Department.	Owner	When Final Plan has been approved by DRB or on appeal by Beaver Creek Resort Company

Eagle County Plan Review and Approval

STEP	RESPONSIBILITY	TIMING
Obtain a building permit from Eagle County by meeting all their requirements. Precise submittal requirements can be obtained from the Eagle County Building Department upon presentation to Eagle County of a photo copy of the warranty deed and a set of plans stamped and approved by the DRB.	Owner	Open
nspection		
1 Request site inspection from the DRB.	Architect/Owner	Open
2. Inspect site to insure compliance with approved plan, examining lot survey point, driveway location, building corners, cut and fill areas, and protected vegetation.	DRB Staff	Within 2 working days
Issue site inspection approval to owner.	DRB Staff	Within 2 working days of submittal
4. Request inspections and obtain approvals for all phases of construction required by Eagle County.	Owner/Contractor	When appropriate
5. Request framing inspection (core and shell) from DRB.	Owner/Contractor	When appropriate
Inspect and approve framing (core and shell).	DRB Staff	As quickly as possible
Request final inspection of landscaping and/or building.	Owner/Contractor	When appropriate
8 Inspect building and/or landscaping and if approved, issue a Certificate of Compliance.	DRB	As quickly as possible
9 Issue Certificate of Compliance from which owner can request a Certificate of Occupancy from Eagle County.	DRB Staff	Immediately following approval

Design Review Process Commercial Facilities, Storefronts and Signage Approval

Obtain an application permit from the DRB, complete it, and return it to the Design Review Board staff.

The application for a sign, graphics, or storefront approval must contain the following information:

- Name, address, telephone number of the applicant and date of application;
- Numerical location of building structure upon its lot, block and filing designation, and street address upon which the sign is to be located;
- The title under which the application is being made;
- Position of the sign on the building in plain view (drawn to scale) and elevation views (drawn to scale);
- Two sets of scale drawings of the plans and specifications, including:
  - the style of lettering, lighting, type of material of which it is fabricated;
  - the method of attachment to the building or to the ground.
- A color sketch of the sign and building, as well as any contiguous streets or buildings, showing how the signs would appear in relation to one another;
- Name of person or persons constructing and erecting the sign;
- A copy of structural calculations showing that the sign support is designed for dead load and wind pressures, if required by the Design Review Board;
- Lineal feet of frontage.

Before construction or installation, written verification stating that the design is approved must be obtained from the Design Review Board.