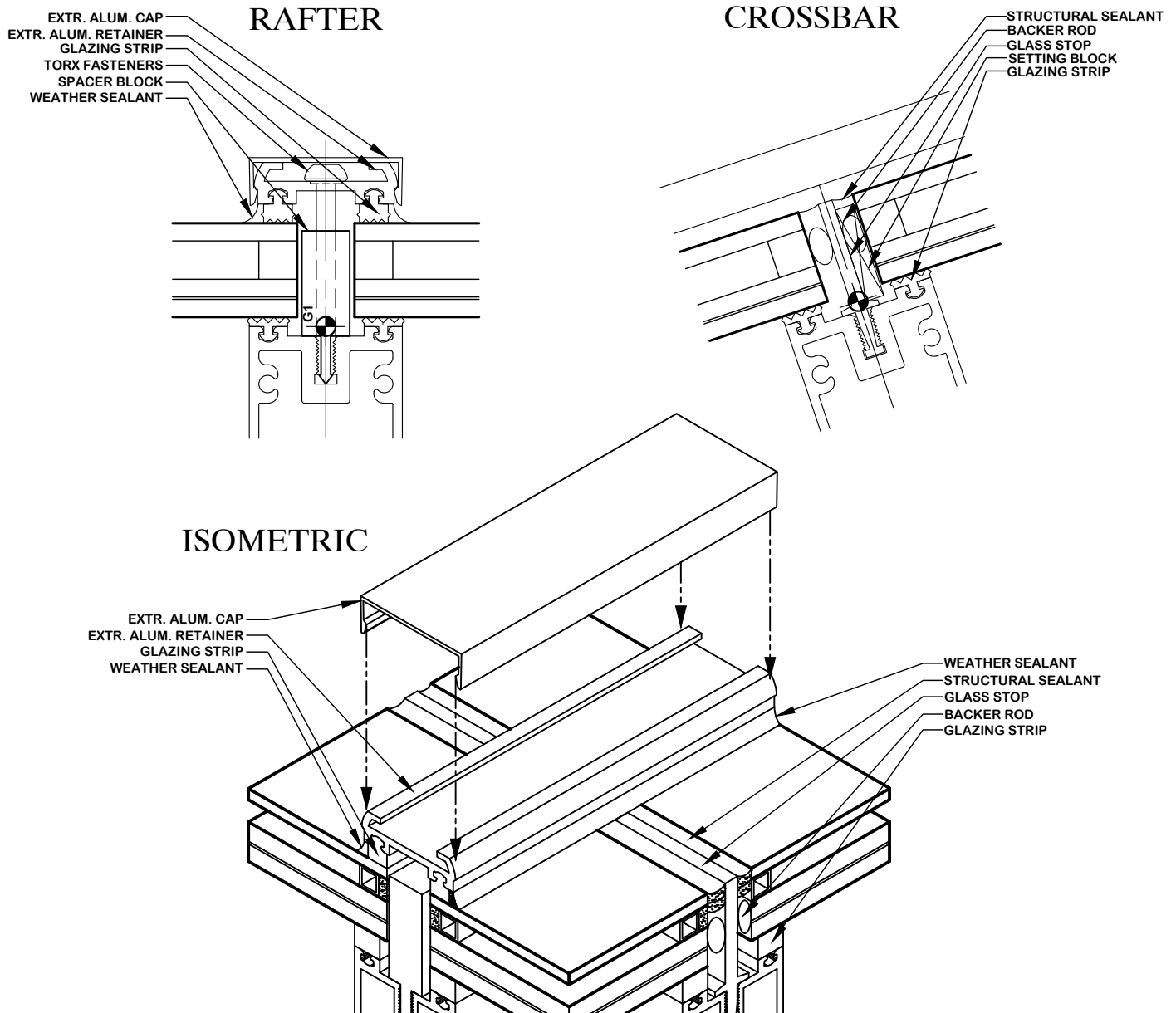


2-SIDED CAPPED SYSTEMS

Super Sky Products' typical glazing system consists of glass panels, or "lites," set on main framing members using extruded aluminum retainers or pressure plates. These retainers are typically fastened to the main framing members with Torx fasteners, sealed with vinyl washers, and spaced at a maximum of 12 inches on center. EPDM glazing gaskets separate the glass from the aluminum above and below. Retainers are continuously wet-sealed in the field with high-performance silicone sealant and covered with a finished aluminum "snap-on cap" extrusion to conceal the retainer fasteners.

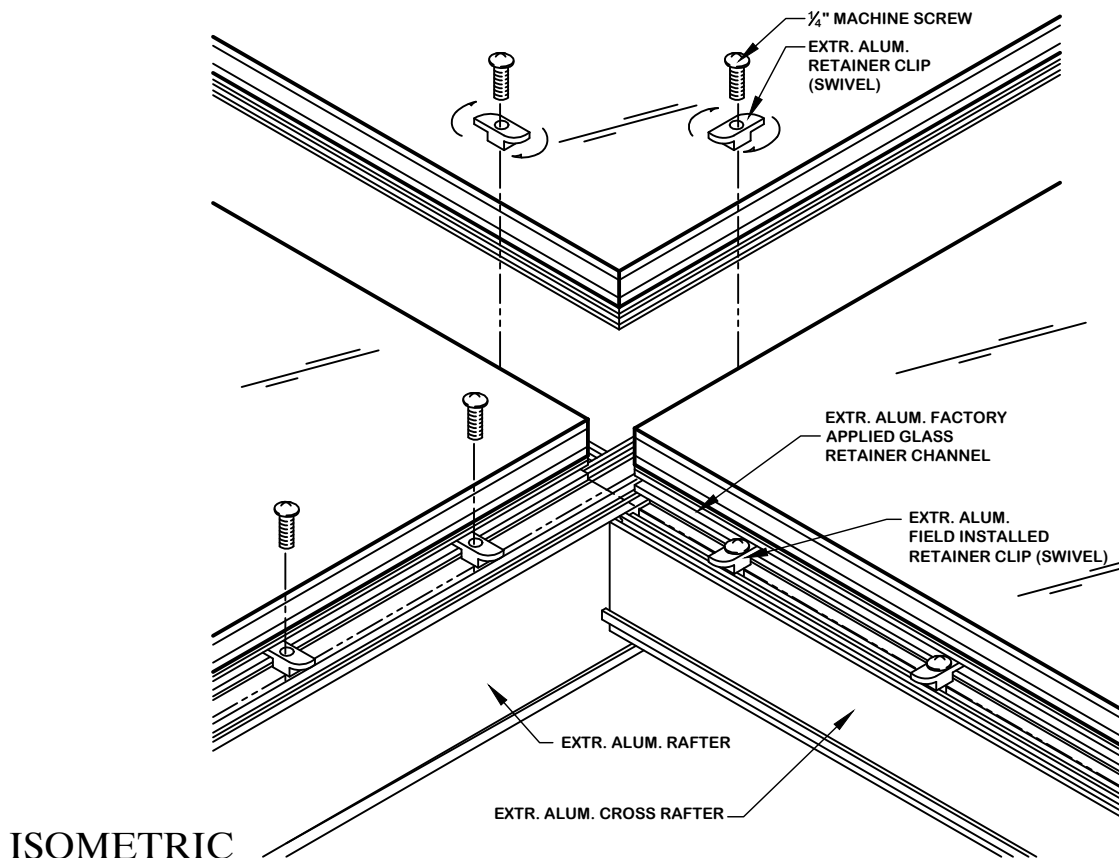
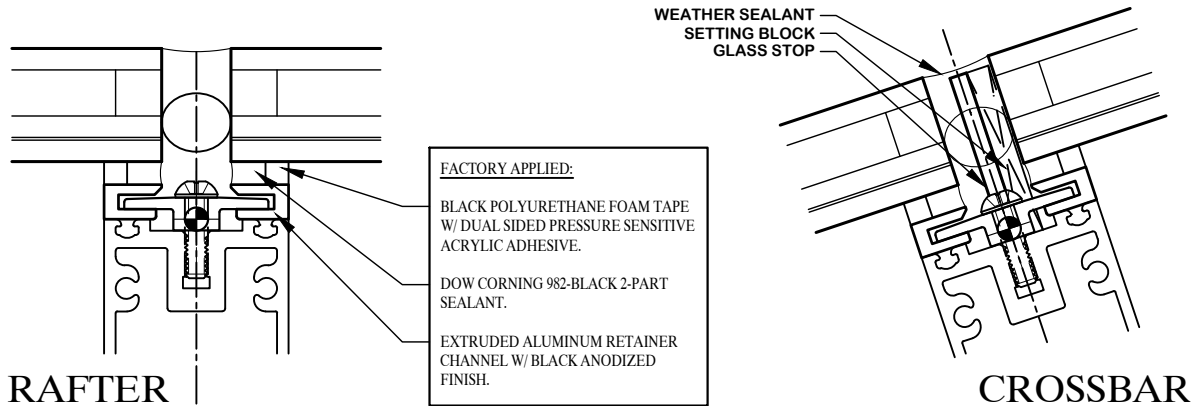
The glass is retained in the frame at horizontal framing members using structural silicone sealant, with joints formed between the glass edges and the cross-rafter glass stop. This design creates a flush joint that prevents water damming and debris accumulation. A slide-in PVC glass stop is standard, while the continuous pressure plate weather seal joints are aligned to ensure a fully watertight installation.



TOTAL FLUSH GLAZING SYSTEMS

Super Sky Products' Total Flush Glazing (TFG) system utilizes advanced silicone sealant technology and features continuous aluminum retainers with intermittent hold-down clips to secure glass to the frame. The retainers are bonded to the glass with structural silicone sealant, applied and cured in a controlled factory environment. With no exterior fasteners or aluminum caps beyond the glass surface, the system ensures a true thermal break.

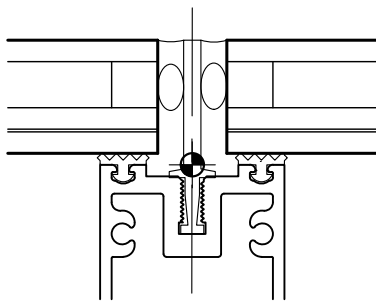
Each lite operates independently from its neighboring lites and can be replaced without having to remove the others. High-performance silicone is used for the exterior weather seals, which are applied after all lites have been secured. The entire exterior surface of the glass is a flat plane, free of obstructions that could trap water or allow dirt and debris to accumulate.



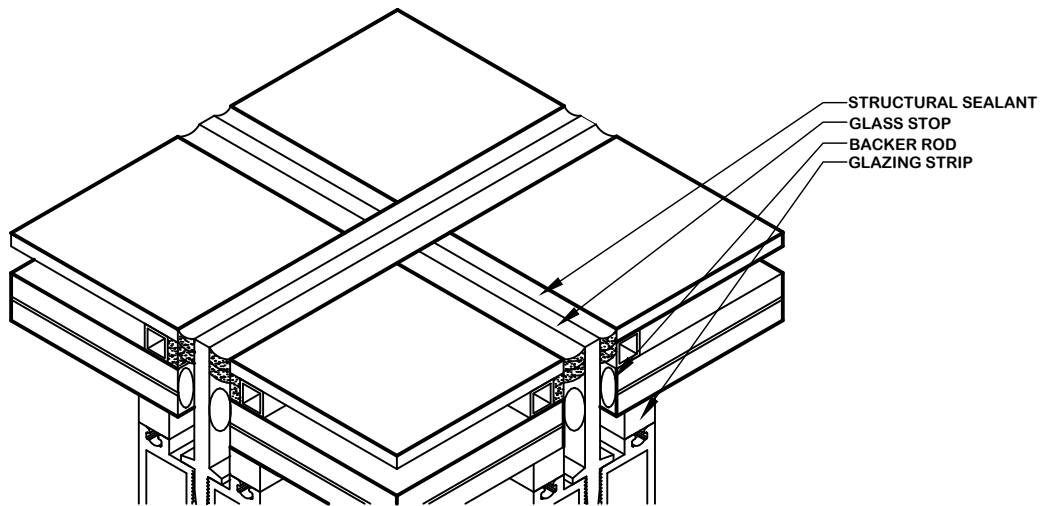
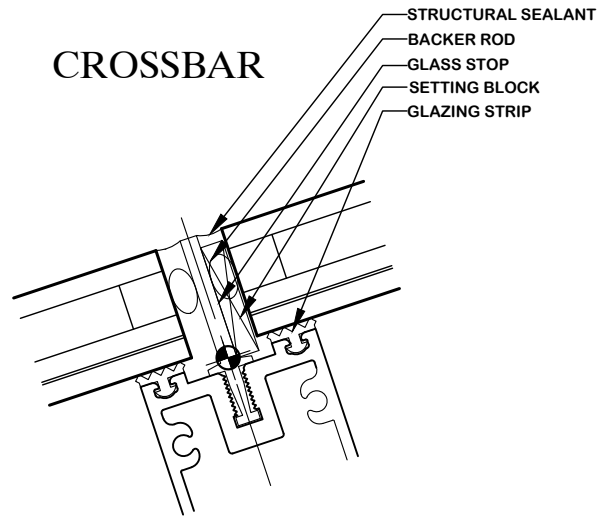
FIELD FLUSH GLAZING SYSTEMS

A field flush glazing system installs glass panels that align flush with one another, resulting in a smooth, uninterrupted appearance. The glass is usually bonded with structural silicone glazing, which eliminates visible pressure plates or caps, thereby reducing water damming and debris accumulation. This system improves aesthetics, drainage performance, and long-term weather resistance while accommodating thermal movement and structural loads.

RAFTER



CROSSBAR

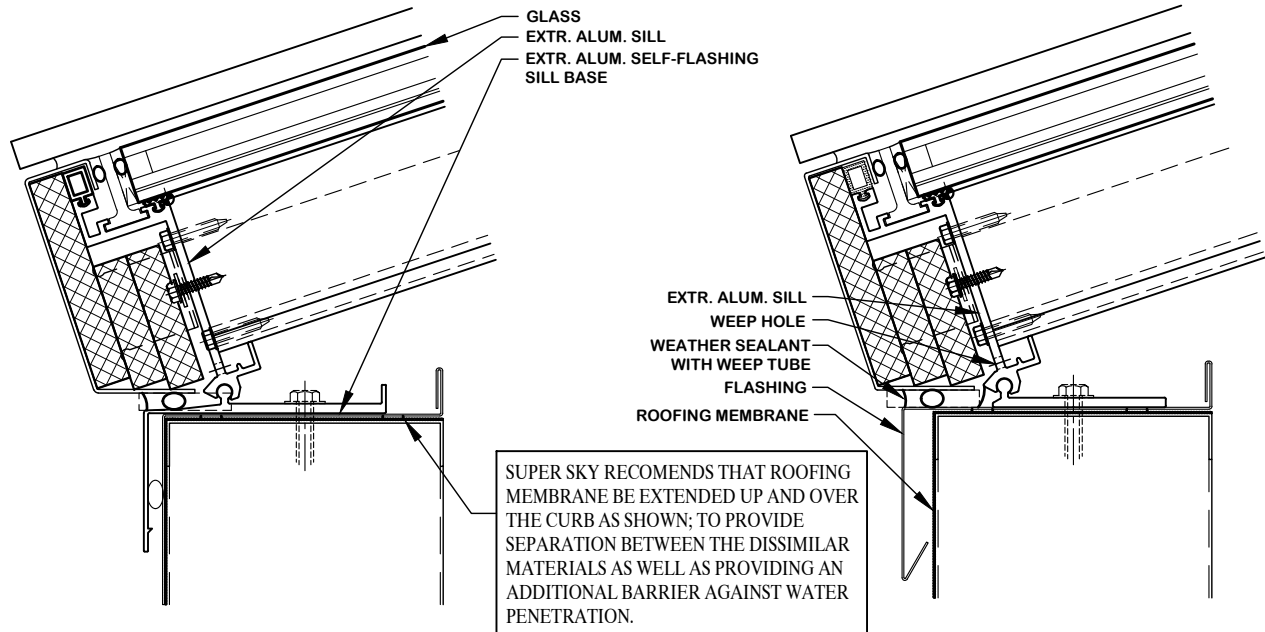


ISOMETRIC



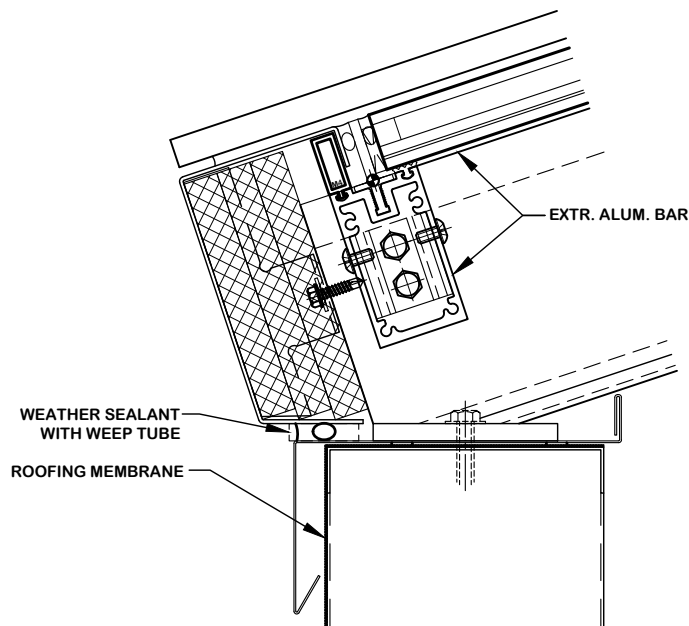
SILLS

Sill, Head, and Endrafters ensure proper sealing of the perimeter with adjacent construction and incorporate formed sheet metal flashing to maintain watertightness. The sill conditions, which are generally the lowest point, function as a condensation gutter system. This design allows for drainage through weep holes that are drilled in the sill extrusion, typically located at each rafter. The weep holes are usually positioned at each rafter.



1 SELF-FLASHING SILL
BD-4 SCALE: 3" = 1'-0"

2 VARIABLE SILL
BD-4 SCALE: 3" = 1'-0"



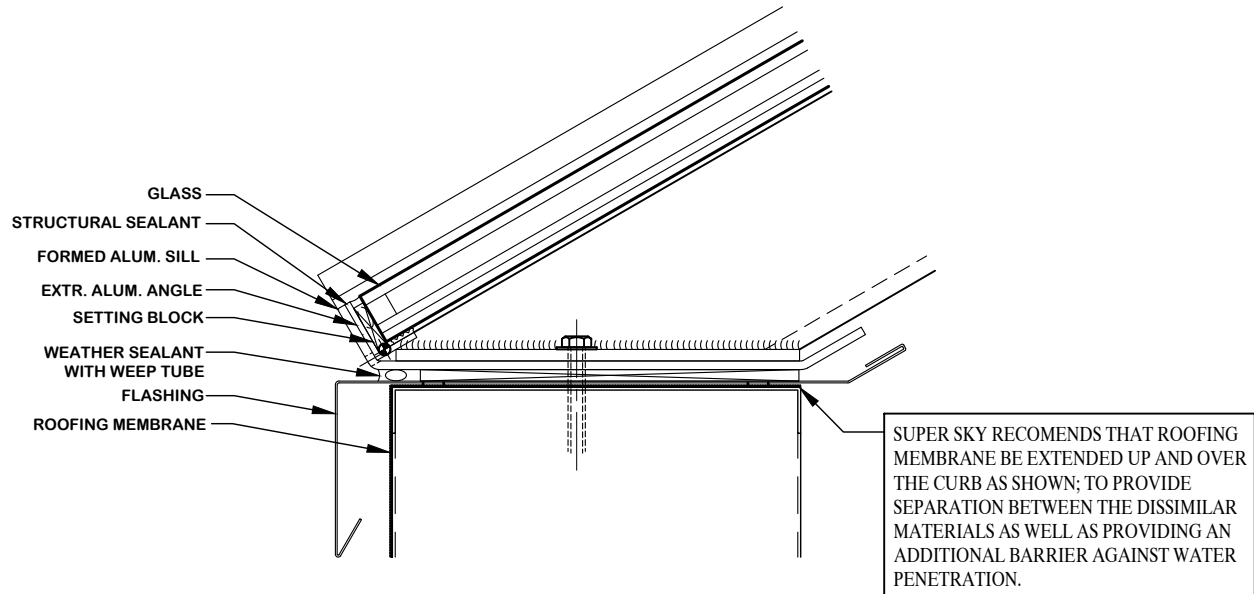
3 CROSSBAR SILL
BD-4 SCALE: 3" = 1'-0"



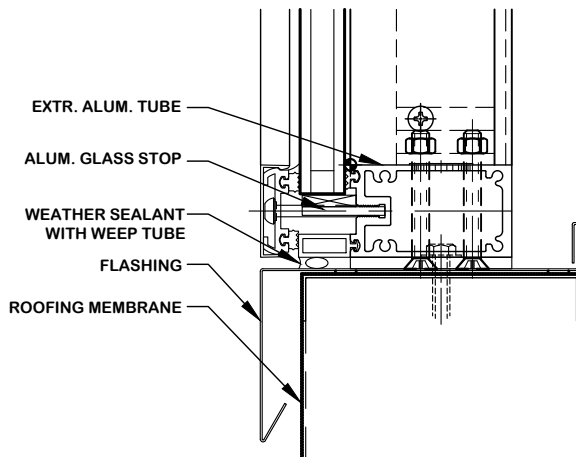
SILLS

(Note, framing size will be determined per design load criteria)

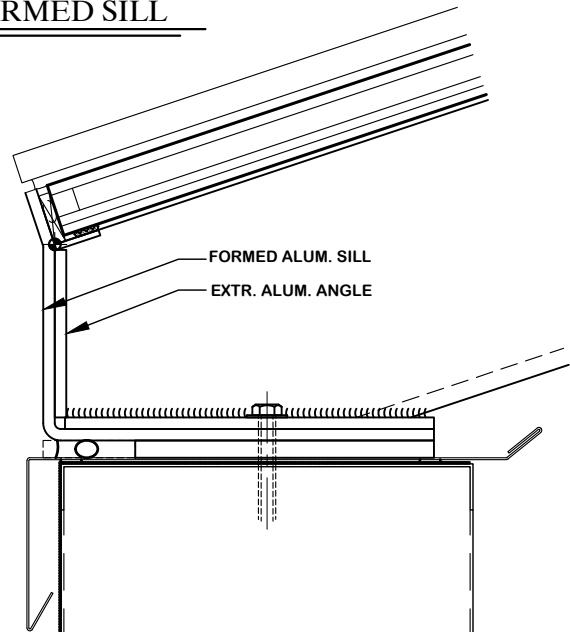
Sill, Head, and Endrafters ensure proper sealing of the perimeter with adjacent construction and incorporate formed sheet metal flashing to maintain watertightness. The sill conditions, which are generally the lowest point, function as a condensation gutter system. This design allows for drainage through weep holes that are drilled in the sill extrusion, typically located at each rafter. The weep holes are usually positioned at each rafter.



1 LOW-PROFILE FORMED SILL
BD-5 SCALE: 3" = 1'-0"



3 SILL
BD-5 SCALE: 3" = 1'-0"

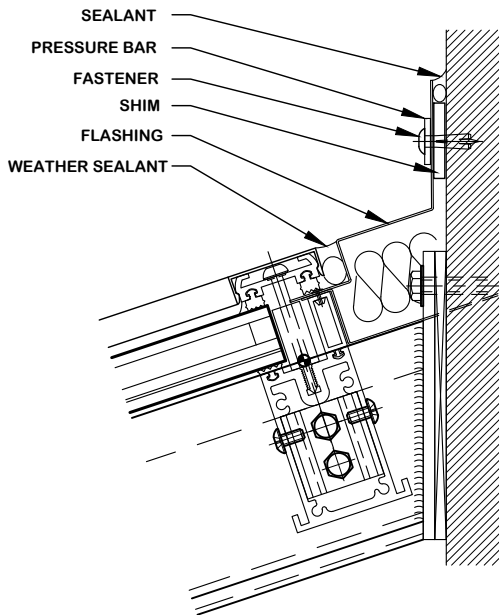


2 FORMED SILL
BD-5 SCALE: 3" = 1'-0"



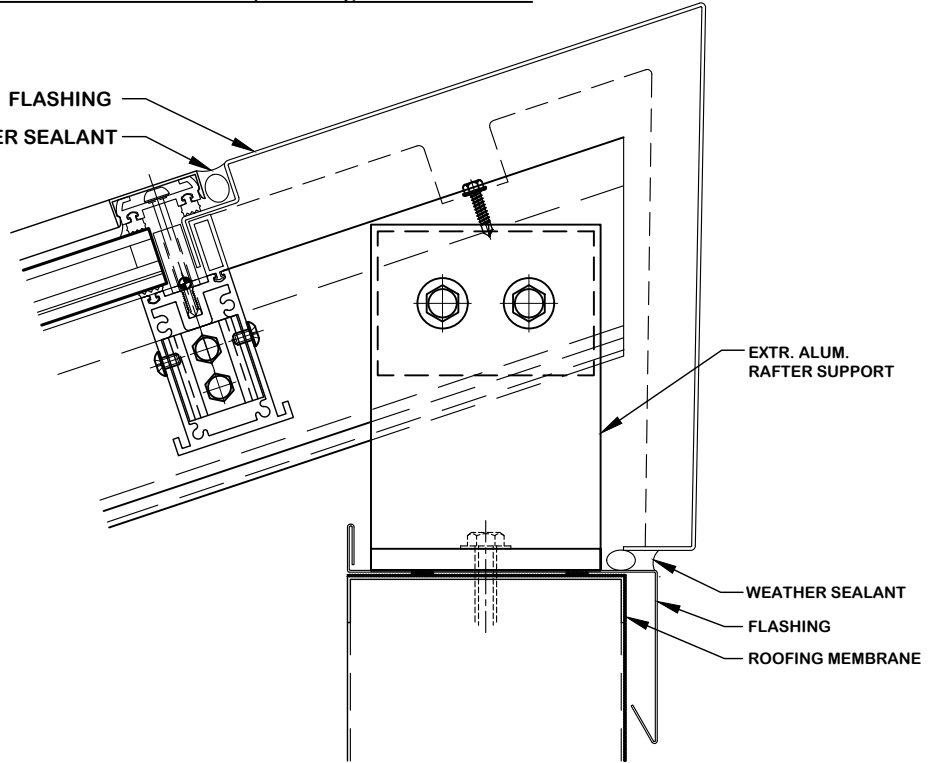
HEAD DETAILS

(Note, framing size will be determined per design load criteria)

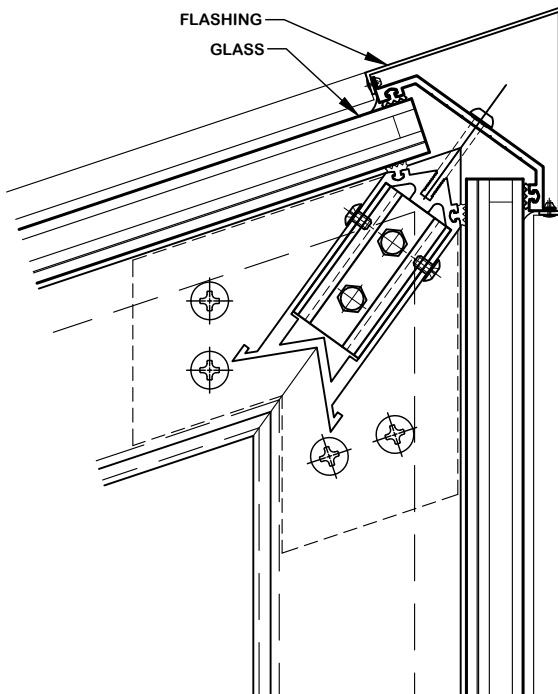


1 HEAD
BD-6 SCALE: 3" = 1'-0"

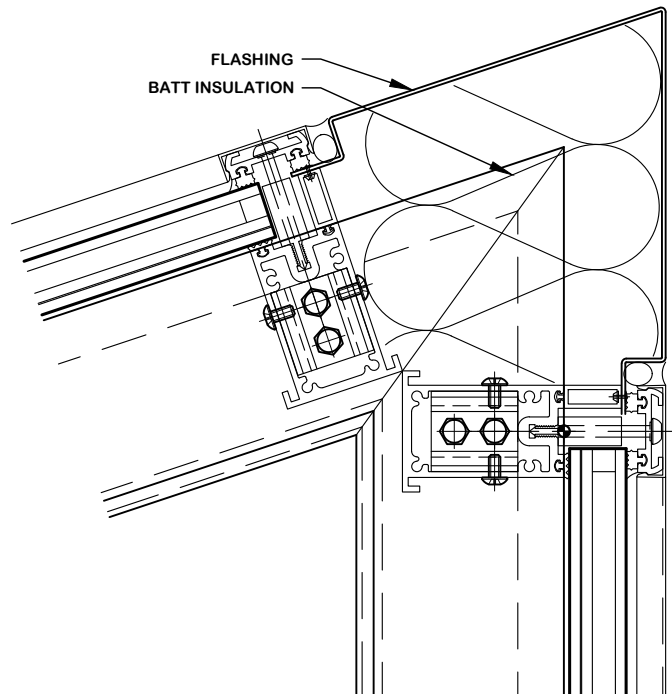
FLASHING
WEATHER SEALANT



3 RAFTER SUPPORT
BD-6 SCALE: 3" = 1'-0"



2 SINGLE KNEE
BD-6 SCALE: 3" = 1'-0"



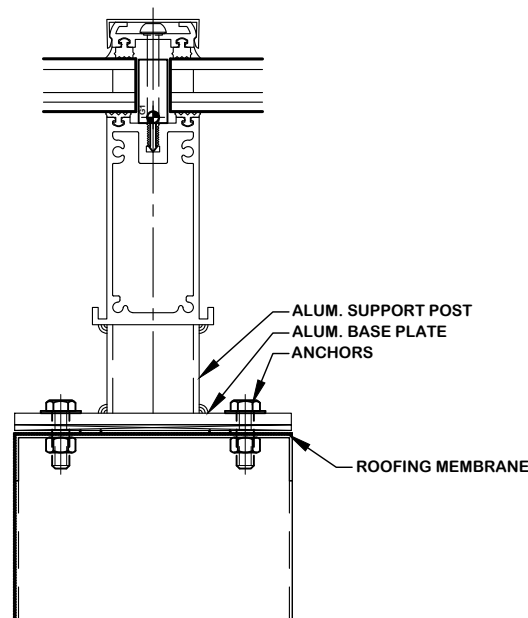
4 DOUBLE KNEE
BD-6 SCALE: 3" = 1'-0"



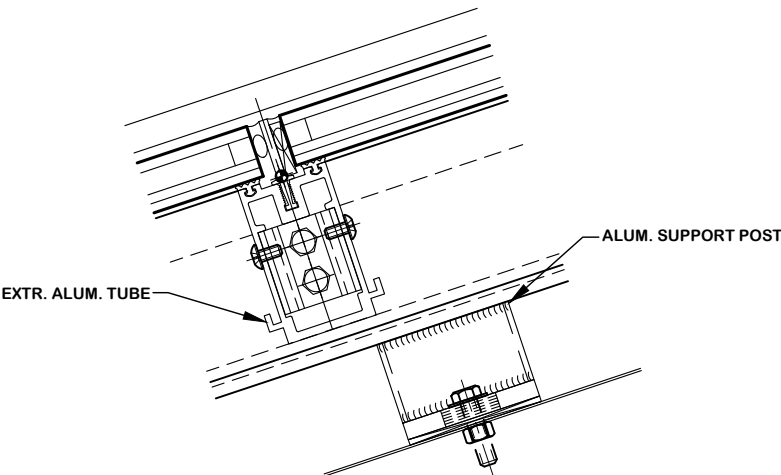
SUPPORTS & MOUNTING

(Note, framing size will be determined per design load criteria)

Support and mounting methods are employed to connect extrusions to supporting structures when constructing entirely with aluminum may be impractical due to the length of the spans. Even with properly designed support structures, it is crucial to have the ability to level, adjust, and allow for thermal movement. The sizes of plates and fasteners are tailored for each specific project, based on the unique loading requirements of that project.



1 RAFTER
BD-7 SCALE: 3" = 1'-0"

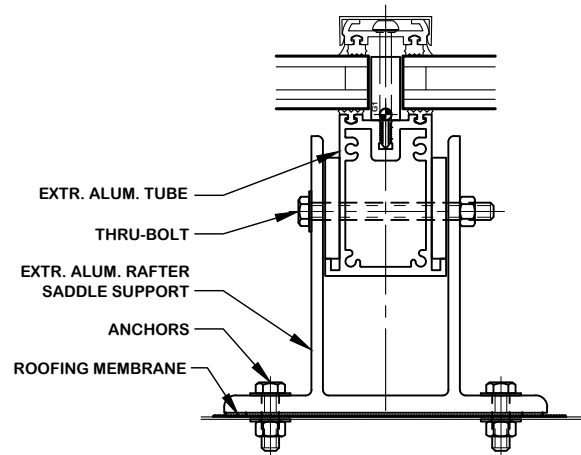


2 CROSSBAR
BD-7 SCALE: 3" = 1'-0"

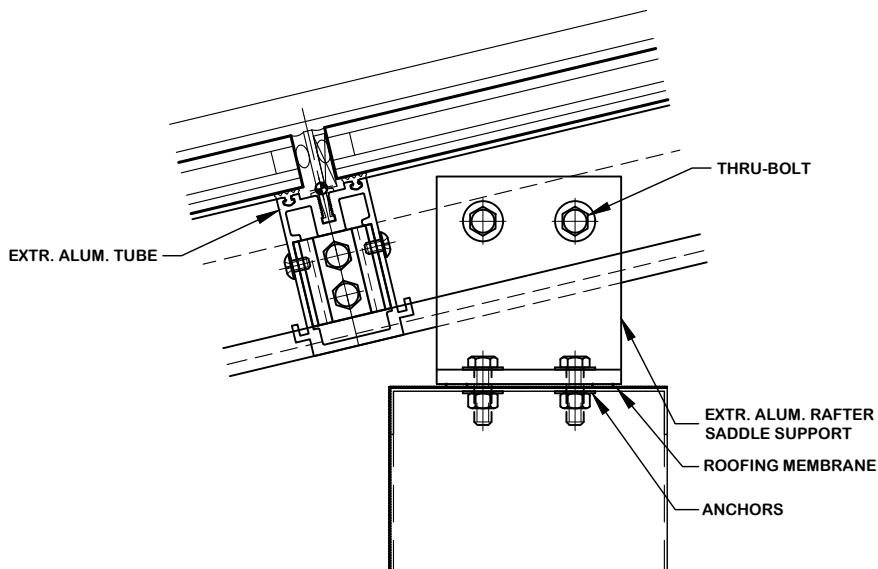


SUPPORTS & MOUNTING

(Note, framing size will be determined per design load criteria)



1 RAFTER SUPPORT
BD-8 SCALE: 3" = 1'-0"



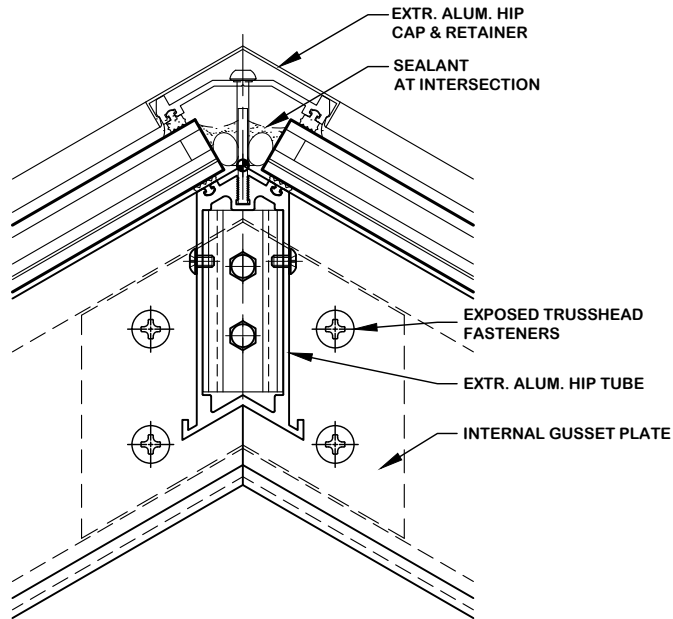
2 RAFTER SUPPORT
BD-8 SCALE: 3" = 1'-0"



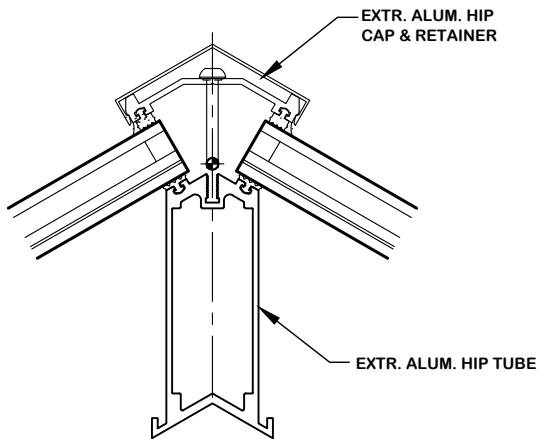
RIDGES, HIPS, & VALLEYS

(Note, framing size will be determined per design load criteria)

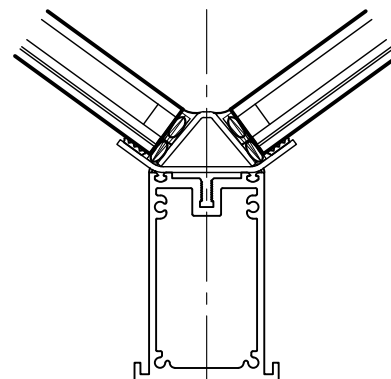
Ridges and hips facilitate adjustments in the planes of the glass, typically utilizing single extruded members. The sizes are determined by structural analysis. The shapes depend on the geometry of the skylight and the angle of the intersecting rafters.



1 RIDGE
BD-9 SCALE: 3" = 1'-0"



2 HIP
BD-9 SCALE: 3" = 1'-0"



3 VALLEY
BD-9 SCALE: 3" = 1'-0"

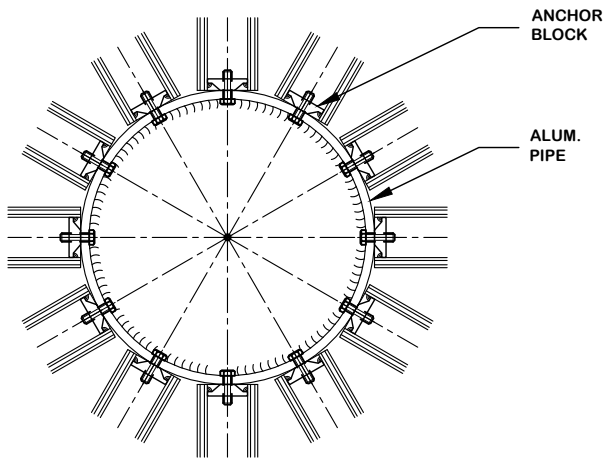


CONNECTIONS & FASTENERS

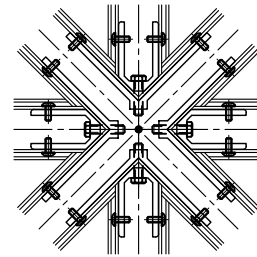
(Note, framing size will be determined per design load criteria)

Connections hold equal importance to the size of the spanning members in skylight design. This section outlines the methods used to join multiple members together.

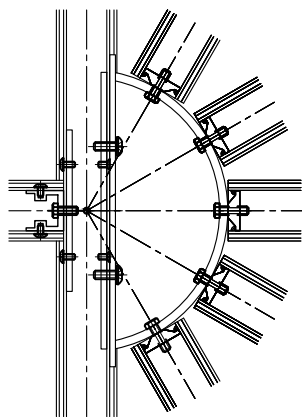
Clips, plates, and fasteners are depicted in standard configurations for detailing purposes; however, all connections will differ based on specific design loads and resultant calculations.



1 CROWN
BD-10 SCALE: 1 1/2" = 1'-0"

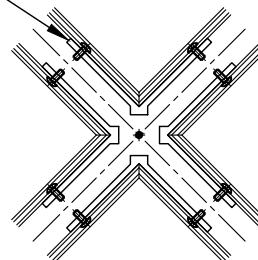


2 APEX (8 BARS)
BD-10 SCALE: 3" = 1'-0"



3 HALF CROWN
BD-10 SCALE: 1 1/2" = 1'-0"

INTERNAL ANGLE &
CHANNEL CLIPS



4 APEX (4 BARS)
BD-10 SCALE: 3" = 1'-0"



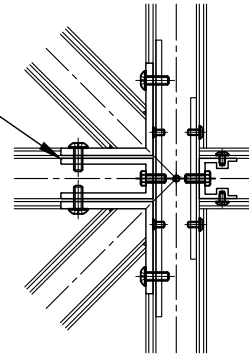
CONNECTIONS & FASTENERS

(Note, framing size will be determined per design load criteria)

CONNECTIONS are as important as the size of spanning members to the skylight design. This section shows methods employed to join multiple members together.

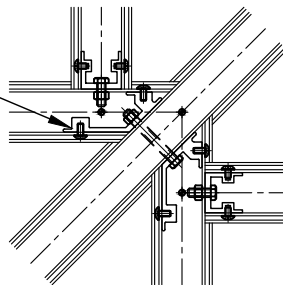
CLIPS, PLATES and FASTENERS are shown at standard configuration for detailing purposes, but all connections will vary according to the specific design loads & resultant calculations.

INTERNAL ANGLE &
CHANNEL CLIPS

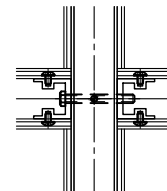


1 APEX (HIP END)
BD-11 SCALE: 1-1/2" = 1'-0"

INTERNAL ANGLE &
CHANNEL CLIPS

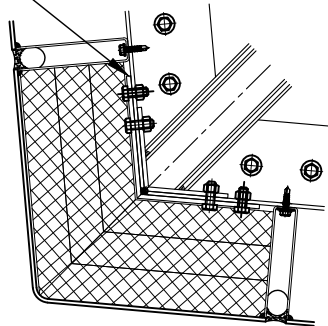


2 HIP/RAFTER
BD-11 SCALE: 1-1/2" = 1'-0"

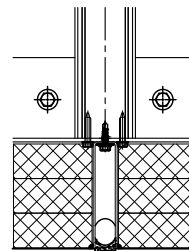


3 RAFTER /
CROSS RAFTER
BD-11 SCALE: 1-1/2" = 1'-0"

FORMED ALUM.
ANGLE CLIPS



4 HIP / SILL
BD-11 SCALE: 1-1/2" = 1'-0"



5 RAFTER / SILL
BD-11 SCALE: 1-1/2" = 1'-0"

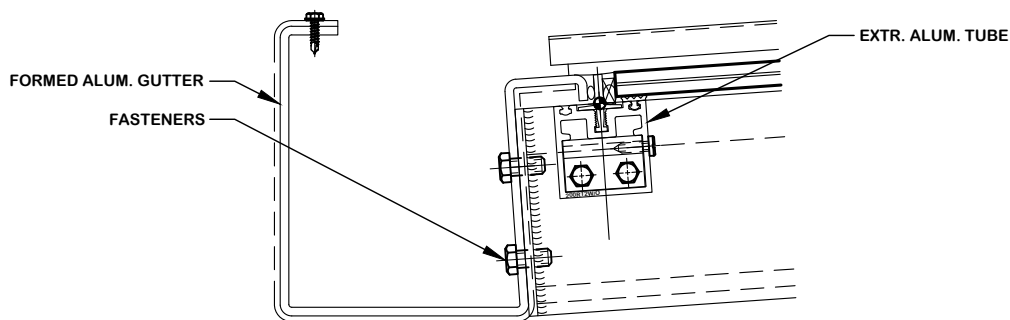


GUTTERS

(Note, framing size will be determined per design load criteria)

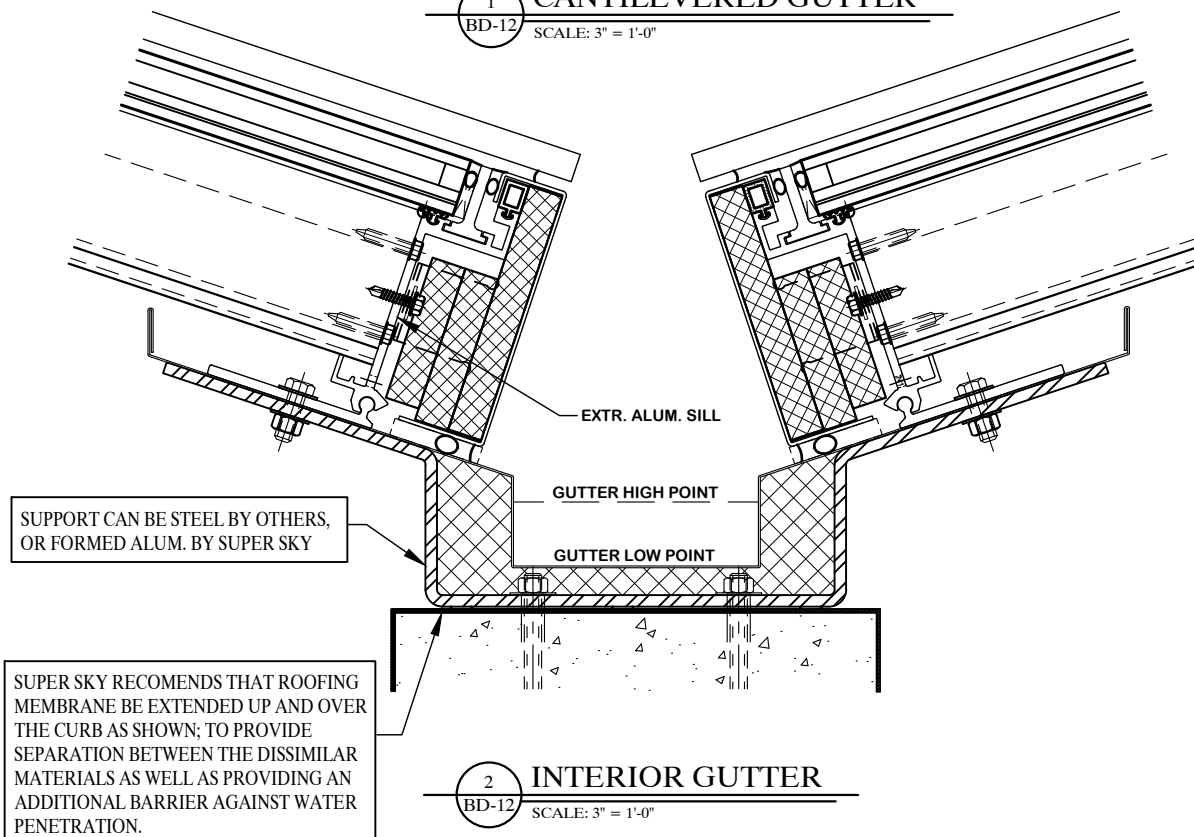
Gutters come in various forms and are primarily designed at the base of a skylight to efficiently drain water to a discharge point. Eave gutters help manage water and ice at the transition from sloped to vertical glass planes above doors and walkways. Additionally, gutters are utilized in skylight clusters, featuring a built-in slope for rapid drainage.

Gutters can be either formed or extruded and typically include pitched sheet metal or neoprene liners that slope toward scuppers or drain locations. They should be insulated to minimize condensation inside and to provide structural support for the pitched liners. The details of the gutters are closely connected to the support system details.



1 CANTILEVERED GUTTER

BD-12 SCALE: 3" = 1'-0"

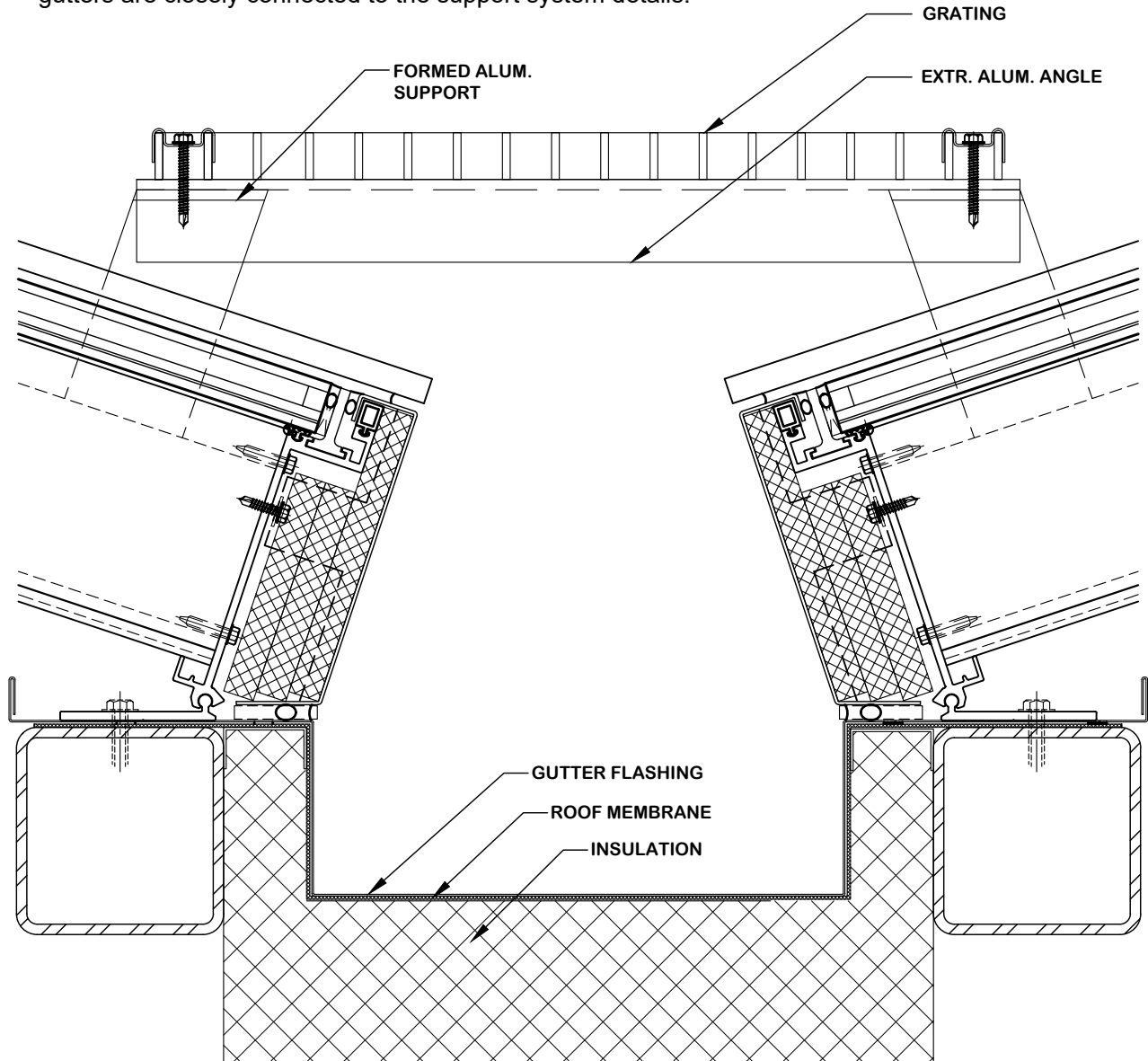


GUTTERS

(Note, framing size will be determined per design load criteria)

Gutters come in various forms and are primarily designed at the base of a skylight to efficiently drain water to a discharge point. Eave gutters help manage water and ice at the transition from sloped to vertical glass planes above doors and walkways. Additionally, gutters are utilized in skylight clusters, featuring a built-in slope for rapid drainage.

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1 GUTTER
BD-13 SCALE: 3" = 1'-0"



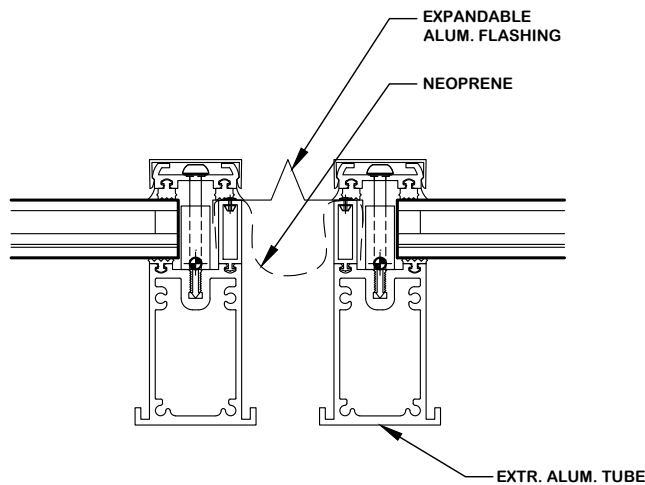
EXPANSION JOINTS

(Note, framing size will be determined per design load criteria)

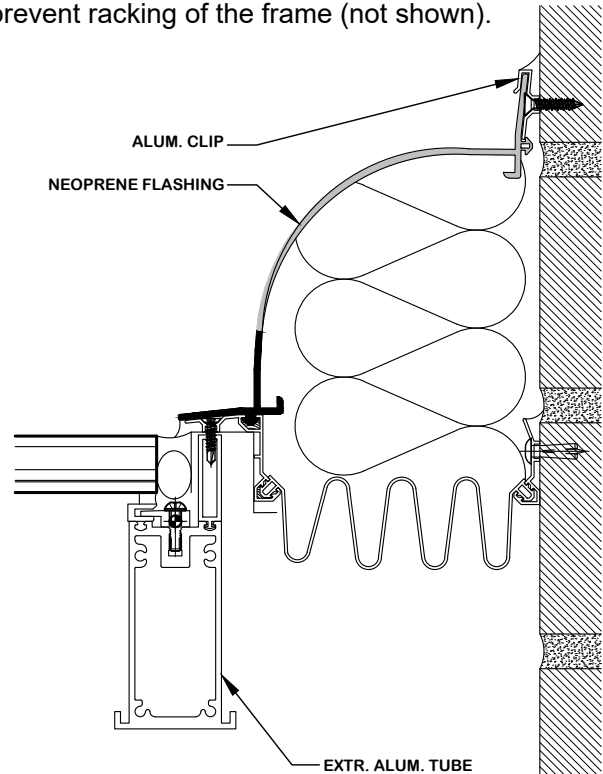
Thermal expansion provisions are typically incorporated into each horizontal crossrafter to manage thermal expansion incrementally, preventing accumulation at one end. Additionally, expansion joints are placed in the sills and heads every 10 to 20 feet to allow for movement while maintaining water-tightness.

There are certain combinations of size, geometry, and supporting structure that may necessitate the use of double members bridged by expansion materials. This condition typically arises when the skylight frame intersects with building expansion joints, requiring the frame to be separated to allow for the building's movement.

Seismic activity in certain regions necessitates specialized engineering techniques, such as the use of sliding connections and expansion joints, to prevent racking of the frame (not shown).



1 EXPANSION JOINT
BD-14 SCALE: 3" = 1'-0"



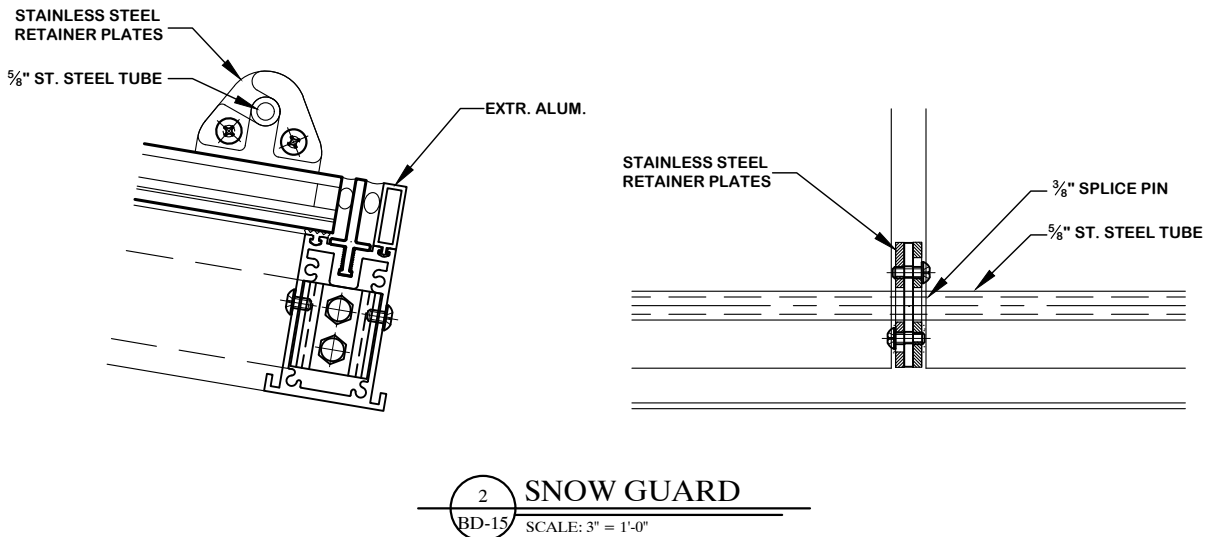
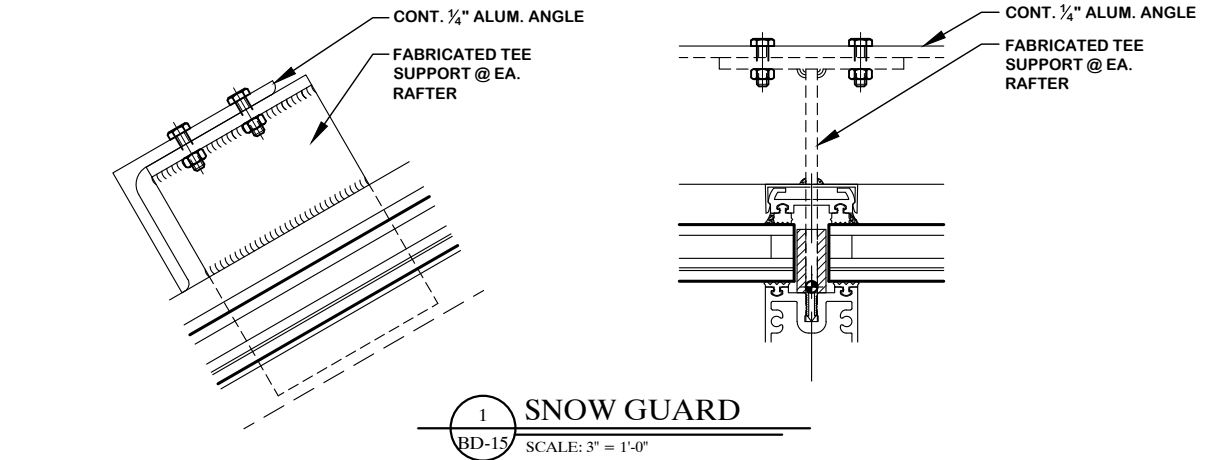
2 END RAFTER w/
EXPANSION JOINT
BD-14 SCALE: 3" = 1'-0"



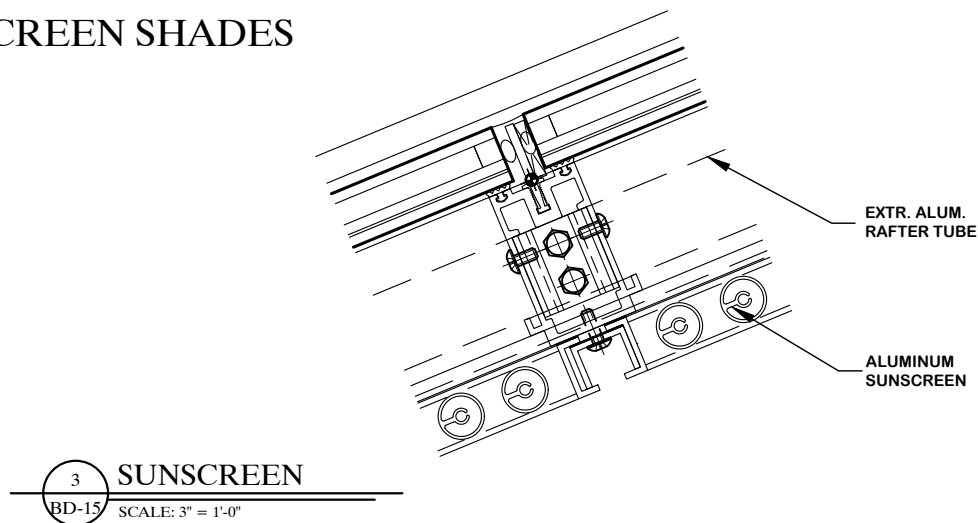
OPTIONS & ACCESSORIES

(Note, framing size will be determined per design load criteria)

SNOW GUARDS

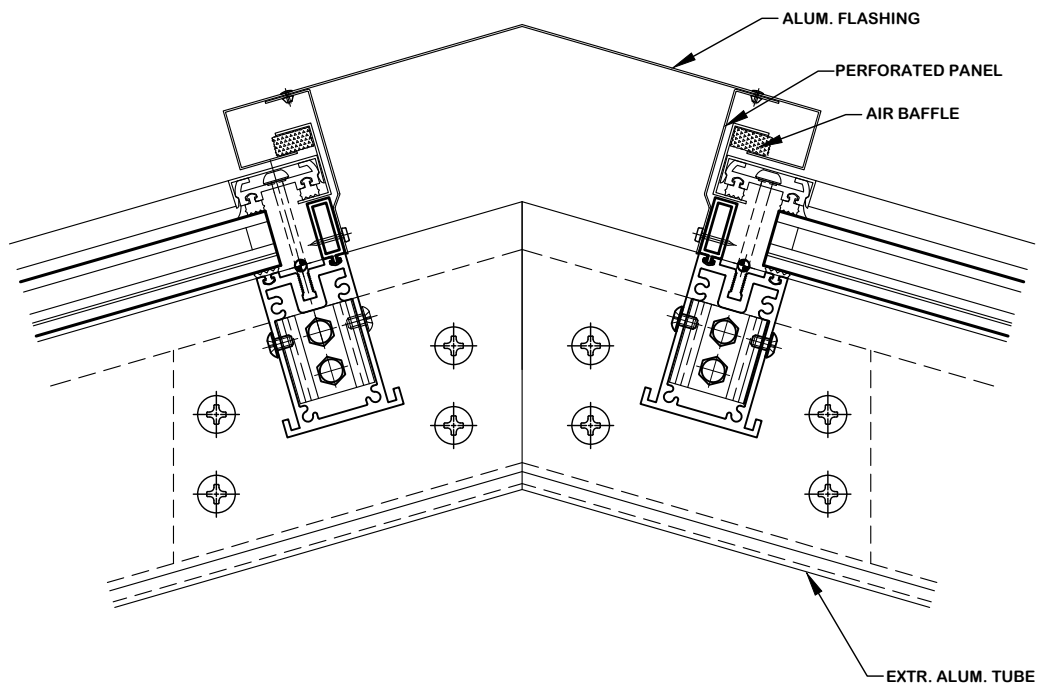


SUNSCREEN SHADES



OPTIONS & ACCESSORIES

(Note, framing size will be determined per design load criteria)

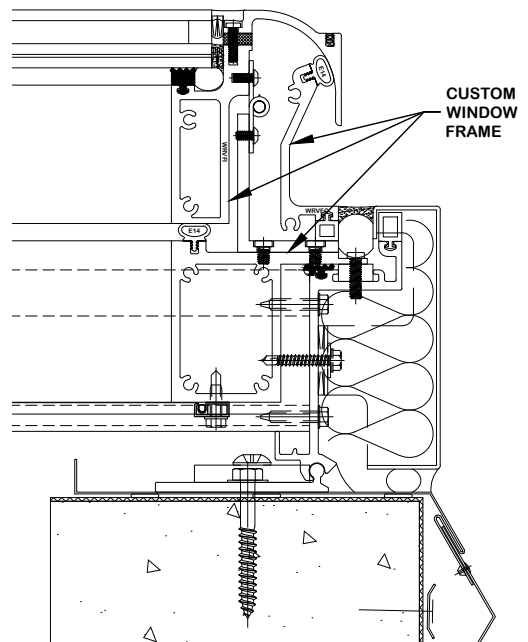
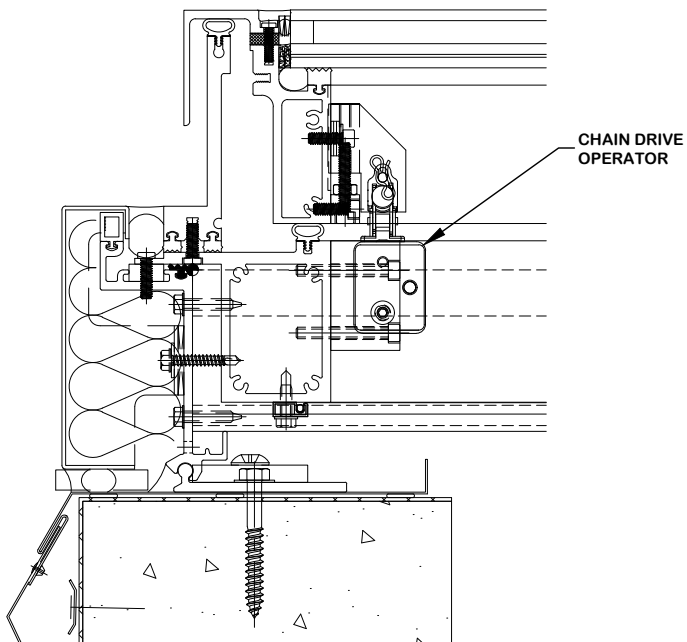
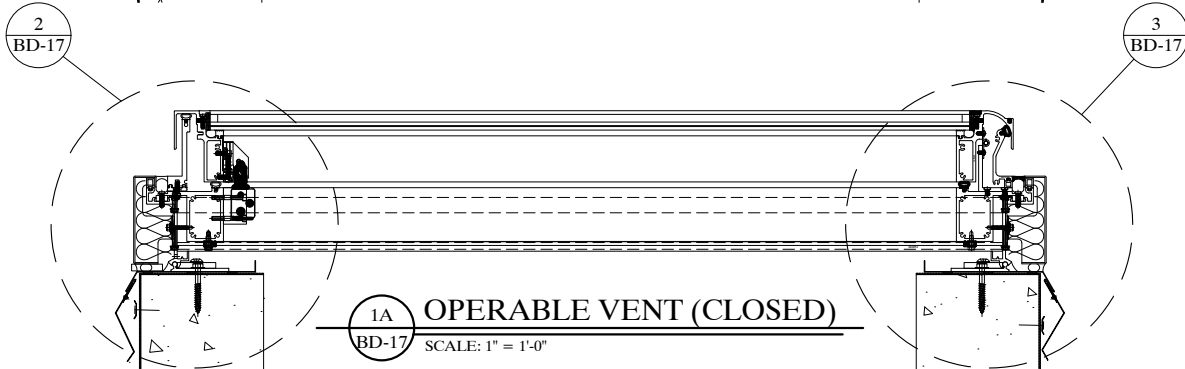
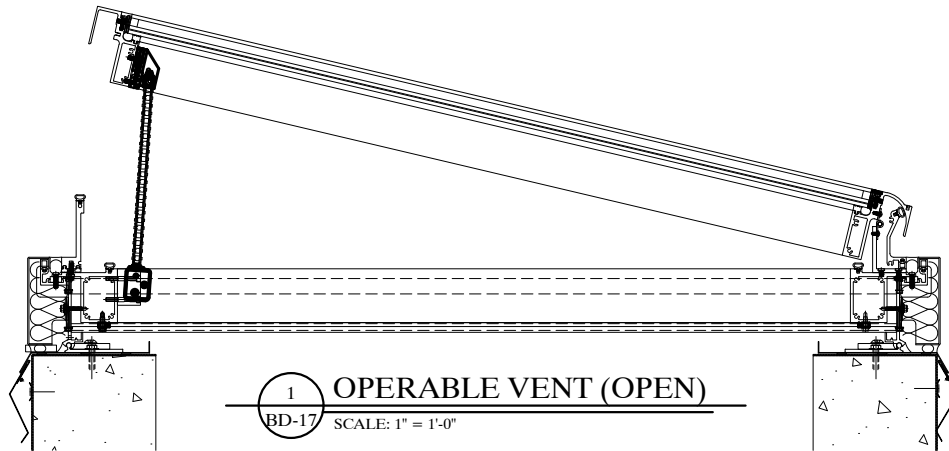


1 VENTED RIDGE
BD-16 SCALE: 3" = 1'-0"



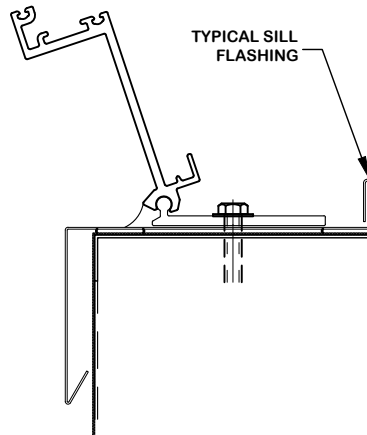
OPTIONS & ACCESSORIES

(Note, framing size will be determined per design load criteria)

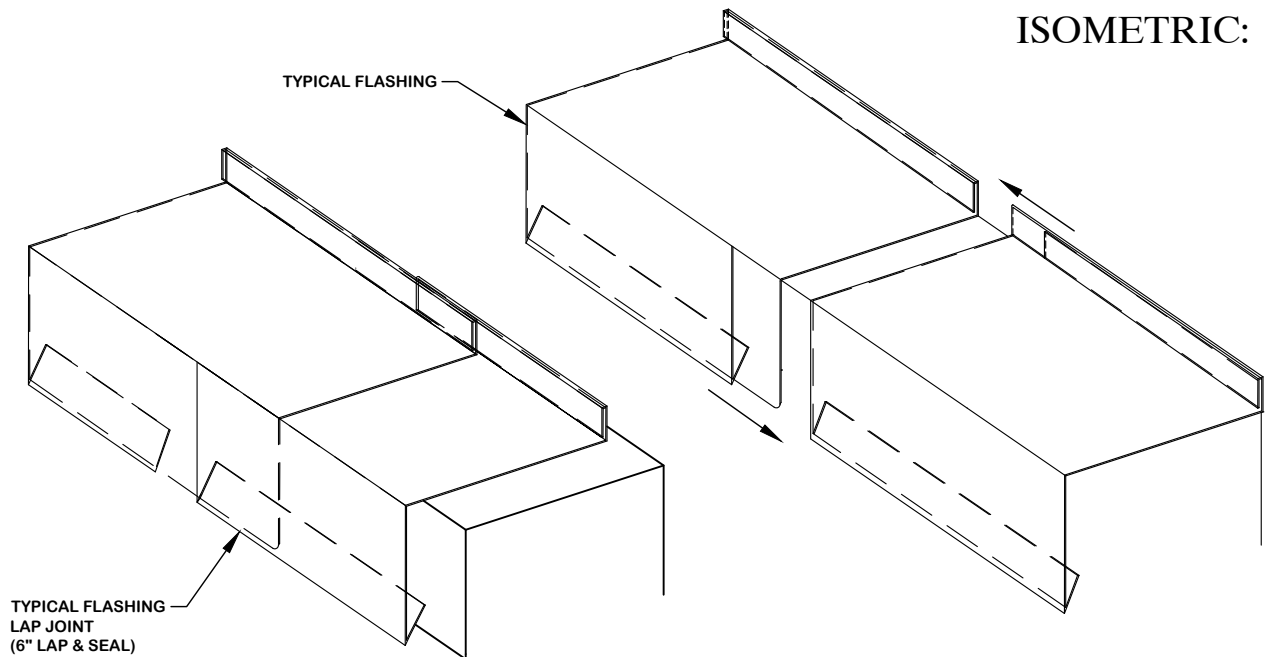


SHEET METAL FLASHING

SECTION:



ISOMETRIC:



SASH FLASHING

GABLE END FLASHING

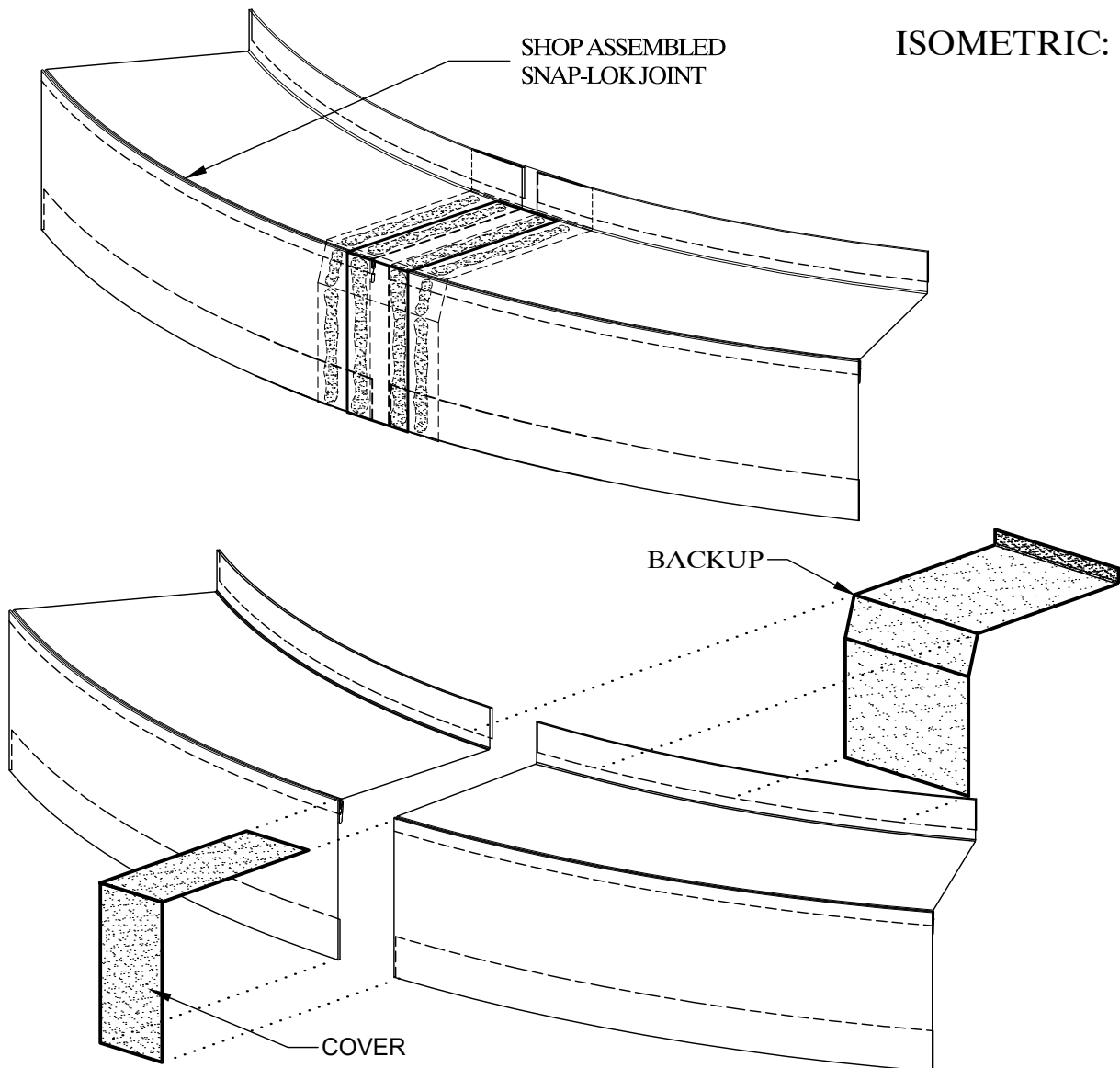
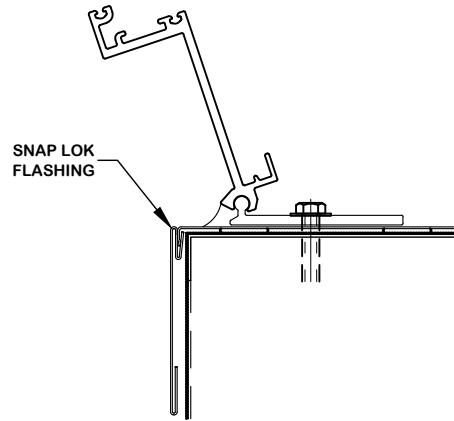
ISOMETRIC:
FLASHING
TRANSITION

ISOMETRIC:
GABLE END



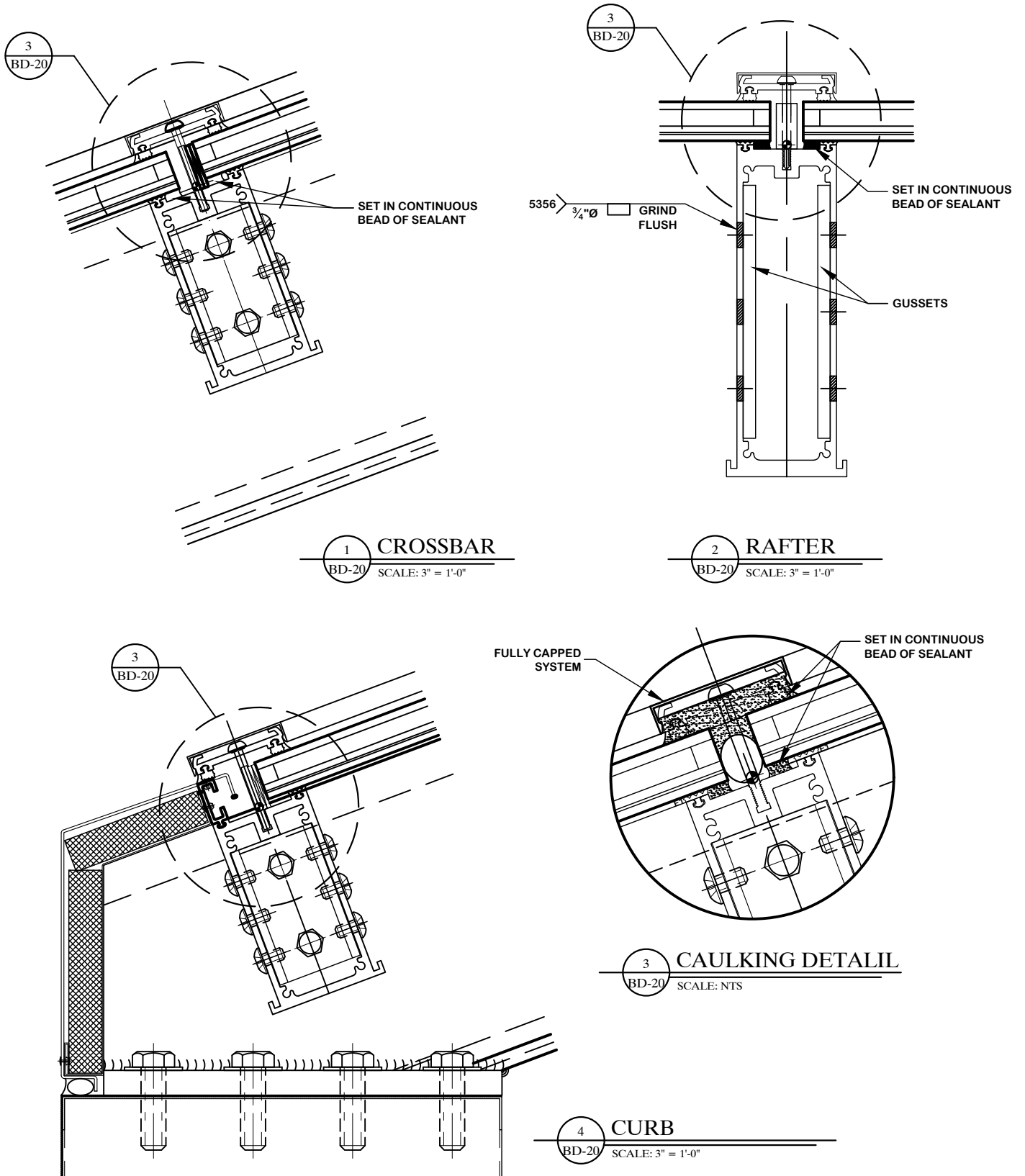
SHEET METAL FLASHING

CURVED SPLICE SOLUTIONS:



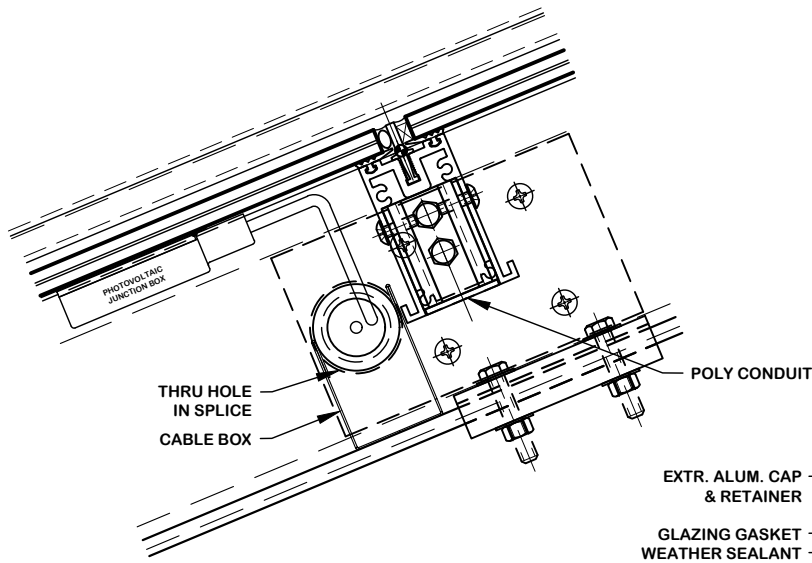
BLAST RESISTANCE

(Note, framing size will be determined per design load criteria)



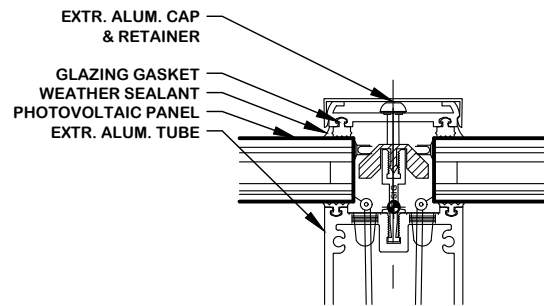
PHOTOVOLTAIC GLAZING

(Note, framing size will be determined per design load criteria)



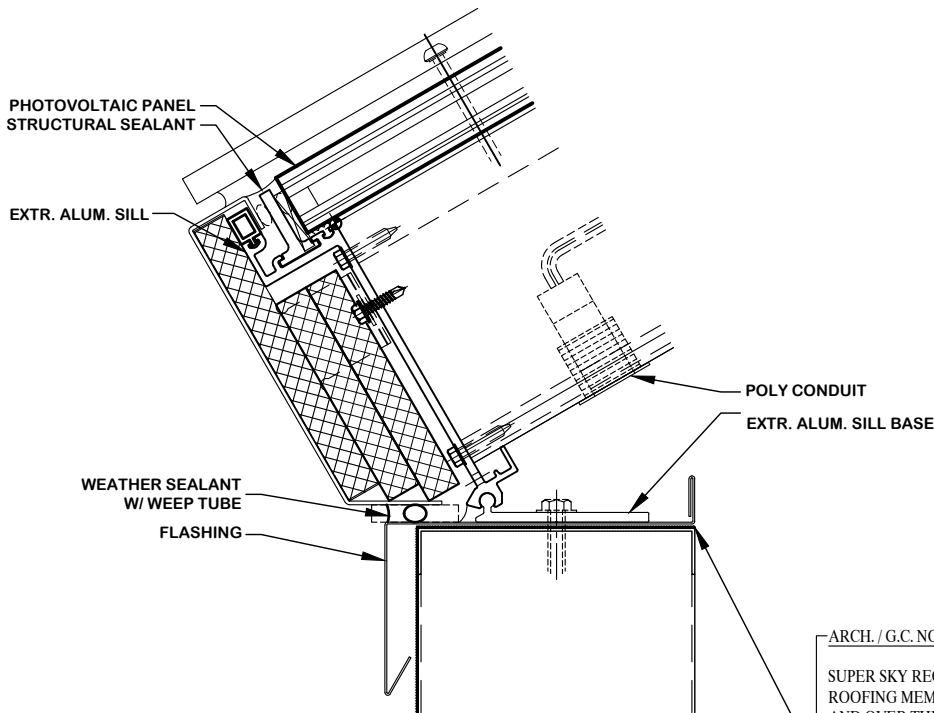
CROSSBAR SECTION

SCALE: 3" = 1'-0"



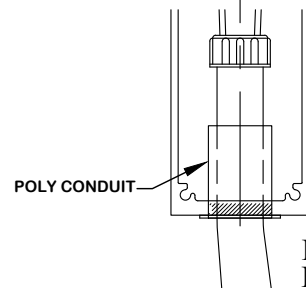
RAFTER TOP

SCALE: 3" = 1'-0"



SILL SECTION

SCALE: 3" = 1'-0"



RAFTER BOTTOM

SCALE: 3" = 1'-0"

ARCH. / G.C. NOTE:

SUPER SKY RECOMMENDS THAT ROOFING MEMBRANE BE EXTENDED UP AND OVER THE CURB AS SHOWN; TO PROVIDE SEPARATION BETWEEN THE DISSIMILAR MATERIALS AS WELL AS PROVIDING AN ADDITIONAL BARRIER AGAINST WATER PENETRATION.

