



NuRoof® Retrofit Systems

Design/Installation Information

INTRODUCTION

If your roof is causing problems due to leaks, high maintenance costs and low energy efficiency, the MBCI NuRoof® Retrofit System is the remedy. With the NuRoof® Retrofit System, you can install a slopped roof which will eliminate leaks and minimize maintenance costs. Energy efficiency may also be increased substantially with additional insulation.

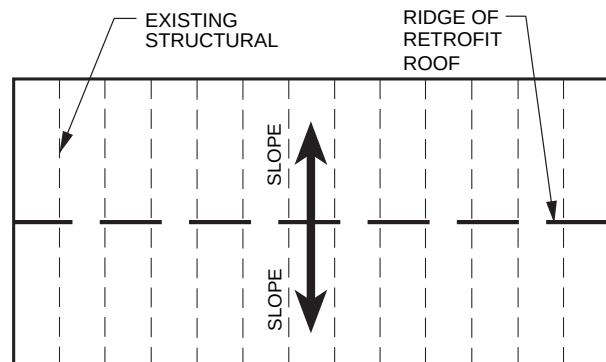
The NuRoof® Retrofit System allows design flexibility with a choice of roof slopes, hips, valleys, gable endwalls, vertical and trapezoidal standing seam panels, as well as the traditional PBR Panel. These panels are available in a wide range of colors and gauges. So, whether you are retrofitting an old warehouse, manufacturing plant or an office building, the MBCI NuRoof® Retrofit System is the answer.

ARCHITECT/OWNER RESPONSIBILITY

The architect/owner using the MBCI NuRoof® Retrofit System must recognize that the existing structural roof system most likely was designed based on the roof load being applied uniformly by means of a metal deck or similar substrate. The NuRoof® Retrofit System will replace the uniform load with a series of concentrated loads onto the existing roof system which may not be feasible in all applications. Also, as a result of the addition of the retrofit roof, additional weight will be added to the existing roof that must be checked. MBCI highly recommends that a structural engineer conduct an investigation of the entire structure being proposed for a retrofit system to determine the adequacy of the existing roof structure to withstand additional loading. Their investigation should include the condition of the existing structural, existing dead loads, can existing loads be removed, (i.e. rock ballast) and what additional dead loads will the structure accept and at what spacing?

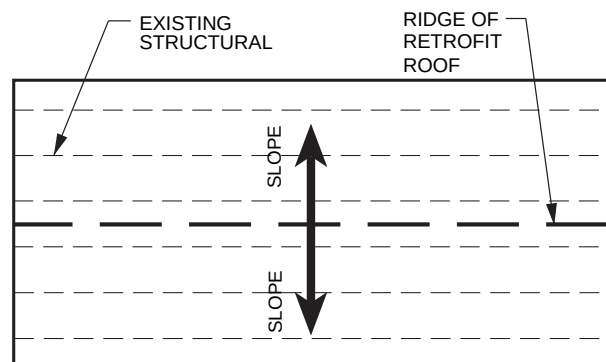
EXISTING STRUCTURAL MEMBERS PARALLEL TO ROOF RETROFIT SLOPE

Installation Sequence Begins on Page NR-9



EXISTING STRUCTURAL MEMBERS PERPENDICULAR TO ROOF RETROFIT SLOPE

Installation Sequence Begins on Page NR-15



NOTE:

1. Some buildings may have structural members in both directions. In this case, each method may be used where required.
2. Hipped NuRoof® Systems may require both methods.

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Descriptions and specifications contained herein were in effect at the time this publication was approved for printing. In a continuing effort to refine and improve products, MBCI reserves the right to discontinue products at any time or change specifications and/or designs without notice and without incurring obligation. **To insure you have the latest information available, please inquire or visit our Web Site at www.mbc.com.** Application details are for illustration purposes only and may not be appropriate for all environmental conditions, building designs, or panel profiles. Projects should be engineered to conform to applicable building codes, regulations, and accepted industry practices. Insulation is not shown in these details for clarity. **If there is a conflict between this manual and the erection drawings, the erection drawings will take precedence.**

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DESIGN INFORMATION

ARCHITECT/ENGINEER INFORMATION

1. The recommended slope range of the retrofit roof is 1/4:12 - 4:12. For slopes greater than 4:12 please contact MBCI.
2. The maximum recommended height of the retrofit system above the existing roof is 10 feet. This is not due to the capacity of the framing, but to the altered shape of the building and its ability to withstand the new wind loads as well as erection limitations.
3. The NuRoof® Retrofit System will add approximately 2 to 4 PSF to the weight of the existing roof.
4. Load transfer may result in concentrated loads occurring on the existing roof. A professional structural engineer must investigate the existing roof to be sure that no undesirable effects are created on the existing roof by the NuRoof® Retrofit System.
5. Lateral wind forces will be developed at gabled endwalls created by the retrofit roof. These wind forces will be transmitted into the existing roof by the "X" bracing parallel to the retrofit purlins. MBCI cannot be responsible for the adequacy of the existing building to resist the additional wind forces which develop at these gabled endwalls.
6. The uniform retrofit roof loads will be concentrated through the retrofit columns. These concentrated loads are then transmitted to the existing roof deck above the existing roof structural members. The adequacy of the existing metal deck corrugations to resist web crippling must be investigated during the design phase. It is not recommended to install this system over the existing insulation board due to possible creep over the life of the system (consult the manufacturer of the existing insulation board for allowable static compressive loads). If the existing roof has moisture trapped within the layers from water intrusion, MBCI recommends the removal of the roofing materials (down to the existing deck) at all base channels or roof support zee locations. This will allow trapped moisture to be drawn out by proper ventilation. If the deck is corroded through to the structural framing, consult with your structural engineer for possible deck reinforcement at the column base attachments to maintain the integrity of the metal deck. NOTE: Existing metal decks can provide lateral support (diaphragm action) to the overall structure. Removing the metal deck at the column locations may compromise the integrity of the existing metal deck diaphragm system. Since the NuRoof® Retrofit System relies on the existing metal deck to transfer its lateral loads to the existing structural system, the existing metal deck must remain intact.
7. An "attic space" will be created by the NuRoof® Retrofit System. MBCI recommends proper venting of this "attic space" in accordance with applicable codes, to be determined by a mechanical engineer, allowing any trapped moisture to escape. MBCI also recommends that "attic space" be reviewed by other building, fire, or insurance related officials for possible sprinkling or extension of existing fire walls to the bottom of the "new" roof system. Use a minimum of 3" vinyl faced roll insulation between the retrofit panels and the retrofit purlins to help prevent condensation and roof noise. If the use of retrofit framing in "New Construction" will result in the installation of HVAC equipment and ductwork in the "attic space" to conflict with the extensive bracing system required by the NuRoof® Retrofit System, please consult with MBCI's sales engineering staff during the design phase to resolve these issues.
8. The NuRoof® framework is equally effective over existing roof decks made of metal, Tongue and Groove wood and concrete decks. However, each existing roof system must be evaluated independently on its ability to accept multiple point loading from the retrofit system.
9. **The NuRoof® framework will be supplied in unpunched 20'-0" lengths. Field cutting of material will be required.**

DESIGN INFORMATION

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ARCHITECT/ENGINEER INFORMATION (Continued)

10. For MBCI to properly design the retrofit framing, the following information is required: Retrofit roof live/wind load, collateral load, snow load, seismic zone, existing building size and location, existing structural orientation (parallel or perpendicular to retrofit roof slope) and spacing, type of existing substrate members, governing code, retrofit roof pitch, retrofit roof panel desired, and the use of hipped or gable ends. MBCI is not responsible for the ability of the existing building to accept the loads imposed upon it by the retrofit framework. The MBCI engineering department can conduct an engineering study of the proposed retrofit framing and provide column reactions based on the above information that may be used by your structural engineer to do their study of the existing structure. Following this page is a design data sheet. This sheet can be filled out and sent to MBCI for our Project Service Department to perform estimates, designs, drawings or a combination of all three.

CAUTION

In certain cases the retrofit roof panel selected may require additional retrofit purlins at the perimeter of the roof to ensure that the panel is capable of resisting the additional wind/snow load in this area.

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DESIGN INFORMATION

DESIGN DATA SHEET

PROJECT INFORMATION

From: _____	Live Load: _____ psf	ASTM E1592 ☐
Date: _____	Dead Load: _____ psf	UL90 ☐
Project Name: _____	Collateral Load: _____ psf	Factory Mutual ☐
Project Location: _____	Snow Load: _____ psf	SREF ☐
(City, State, County): _____	Wind Speed: _____ mph	
Building Code: _____	Importance Factor: _____	
Deflection Rqmts.: _____	Exposure Category: _____	

EXISTING ROOF GEOMETRY

Length: _____ ft	Eave Height: _____ ft
Width: _____ ft	Overhang: _____ ft
Slope: _____ :12	Parapet Height: _____ ft

(Please provide drawings of existing building - Including structural drawings)

EXISTING ROOF TYPE

Built Up ☐	Shingle ☐	Other - Specify - _____
Modified Bitumen ☐	Trocal ☐	_____
Single Ply ☐	PVC ☐	_____

EXISTING ROOF SUBSTRATE

Insulation Type: _____ in.	Tectum Thickness: _____ in.
Insulation Thickness: _____ in.	Concrete Thickness: _____ in.
Plywood Thickness: _____ in.	Lightweight ☐
Wood Thickness: _____ in.	Structural ☐
Metal Deck Thickness: _____ in.	Precast ☐
Metal Deck Gauge: _____	Other - Specify _____

EXISTING STRUCTURAL MEMBERS

Bar Joists: _____ @ _____" o.c.	Wood Trusses: _____ @ _____" o.c.
"Hot Rolled" Steel: _____ @ _____" o.c.	Concrete Beams: _____ @ _____" o.c.
Wood Rafters: _____ @ _____" o.c.	Other - Specify: _____ @ _____" o.c.

Has the existing structure been analyzed by a professional engineer?

yes ☐ Engineer's name: _____
 no ☐ Engineer's phone #: _____

NUROOF® GEOMETRY

Length: _____ ft	Ridge Condition: _____
Width: _____ ft	Gable ☐
Slope: _____ :12	Hip ☐
Eave Height: _____ ft	Roof Panels: _____ (Profile, Width, Gauge)
Overhang: _____ ft	Wall Panels: _____ (Profile, Width, Gauge)
Eave Condition: Eave Trim ☐	Fascia: _____ (Profile, Width, Gauge)
Box Gutter ☐	Structural Members: Red Oxide ☐
Sculptured Gutter ☐	Galvanized ☐
Snow Gutter ☐	

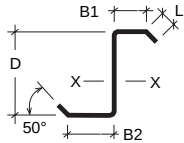
(Please provide drawings of new proposed roof plan)

NOTES

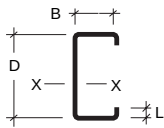
DESIGN INFORMATION

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SECTION PROPERTIES



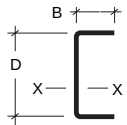
D x B1 x B2 (in.)	Section	Ga.	Weight (PLF)	AXIS X-X			Ma (in.-Kips)
				Ix (in.4/ft.)	Sx (in.3/ft.)	Rx (in.)	
4 x 2 x 2	Zee	16	1.793	1.375	0.688	1.615	23.473
4 x 2.125 x 2.375	Zee	16	1.793	1.277	0.561	1.556	19.153
3.5 x 1.5 x 1.5	Zee	16	1.592	0.876	0.500	1.367	17.075
6 x 2.125 x 2.375	Zee	16	2.395	3.948	1.344	2.368	45.866
8 x 2.125 x 2.375	Zee	16	2.796	7.759	1.975	3.072	67.407



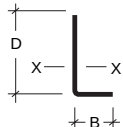
D x B (in.)	Section	Ga.	Weight (PLF)	AXIS X-X			Ma (in.-Kips)
				Ix (in.4/ft.)	Sx (in.3/ft.)	Rx (in.)	
4 x 2.5	Cee	16	1.994	1.560	0.780	1.631	26.616
4 x 2.5	Cee	18	1.581	1.261	0.630	1.647	21.503
6 x 2.5	Cee	16	2.395	3.971	1.324	2.375	45.180
8 x 2.5	Cee	16	2.796	7.791	1.948	3.078	66.482
CS-1	Cee	18	0.815	0.116	0.138	0.694	4.717



D x B (in.)	Section	Ga.	Weight (PLF)	AXIS X-X			Ma (in.-Kips)
				Ix (in.4/ft.)	Sx (in.3/ft.)	Rx (in.)	
HS-1	Hat	16	1.276	0.130	0.167	0.588	5.710



D x B (in.)	Section	Ga.	Weight (PLF)	AXIS X-X			Ma (in.-Kips)
				Ix (in.4/ft.)	Sx (in.3/ft.)	Rx (in.)	
4.125 x 2	Channel	16	1.592	1.273	0.617	1.649	21.070
6.125 x 2	Channel	16	1.994	3.197	1.044	2.335	35.627
8.125 x 2	Channel	16	2.395	6.293	1.549	2.989	52.870



D x B (in.)	Section	Ga.	Weight (PLF)	AXIS X-X			Ma (in.-Kips)
				Ix (in.4/ft.)	Sx (in.3/ft.)	Rx (in.)	
2 x 2	Angle	16	0.772	0.093	0.173	0.639	5.906
2.5 x 1.5	Angle	22	0.382	0.077	0.096	0.827	3.272

Notes:

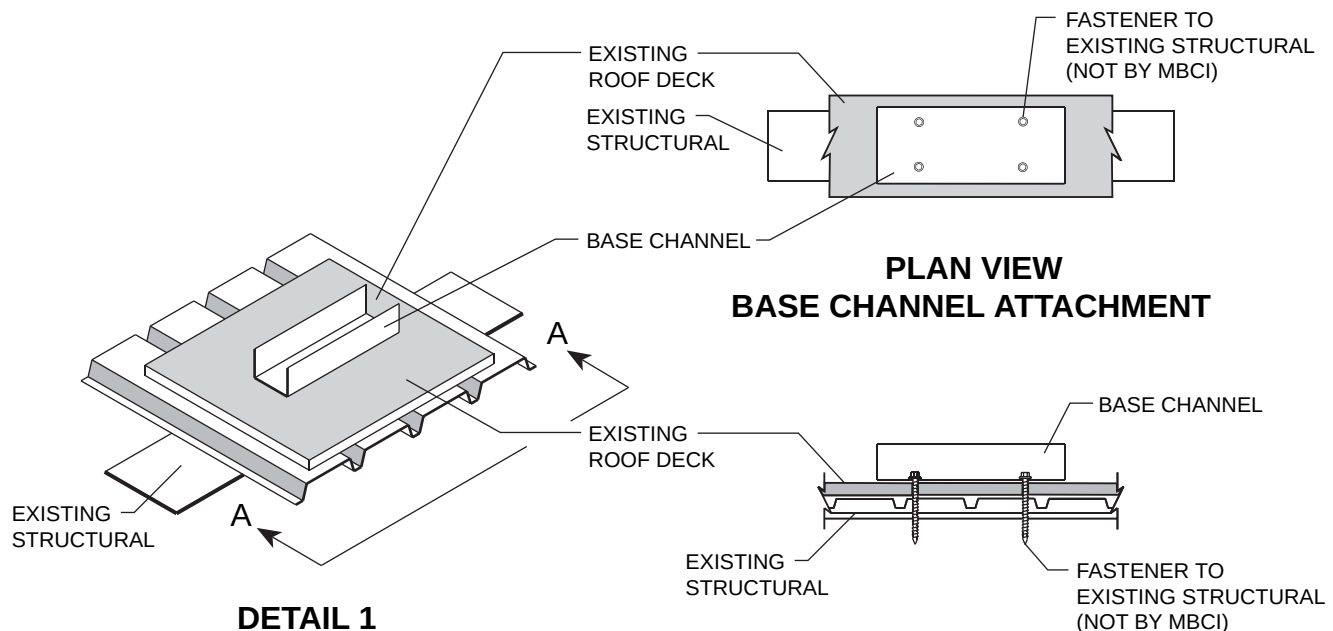
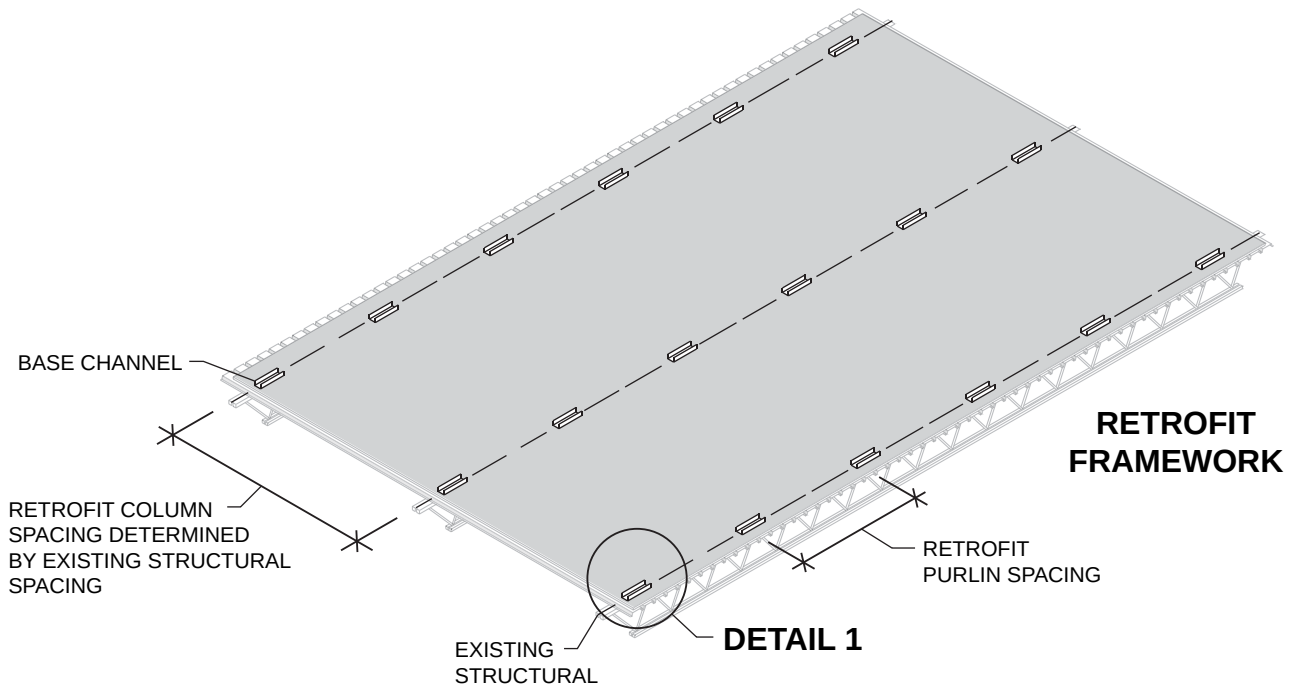
- 1) All calculations for the properties of cees and zeos are calculated in accordance with the 2001 North American Specification for the Design of Cold-Formed Steel Structural Members published by the American Iron and Steel Institute (A.I.S.I.).
- 2) Ix is for deflection determination.
- 3) Sx is for bending.
- 4) Ma is allow able bending moment.
- 5) The allow able bending moment (Ma) assumes that the compressive flange is laterally braced so as to provide the full moment capacity of the section.

The Engineering data contained herein is for the expressed use of customers and design professionals. Along with this data, it is recommended that the design professional have a copy of the most current version of the North American Specification for the Design of Cold-Formed Steel Structural Members published by the American Iron and Steel Institute to facilitate design. This Specification contains the design criteria for cold-formed steel components. Along with the Specification, the designer should reference the most current building code applicable to the project jobsite in order to determine environmental loads. If further information or guidance regarding cold-formed design practices is desired, please contact the manufacturer.

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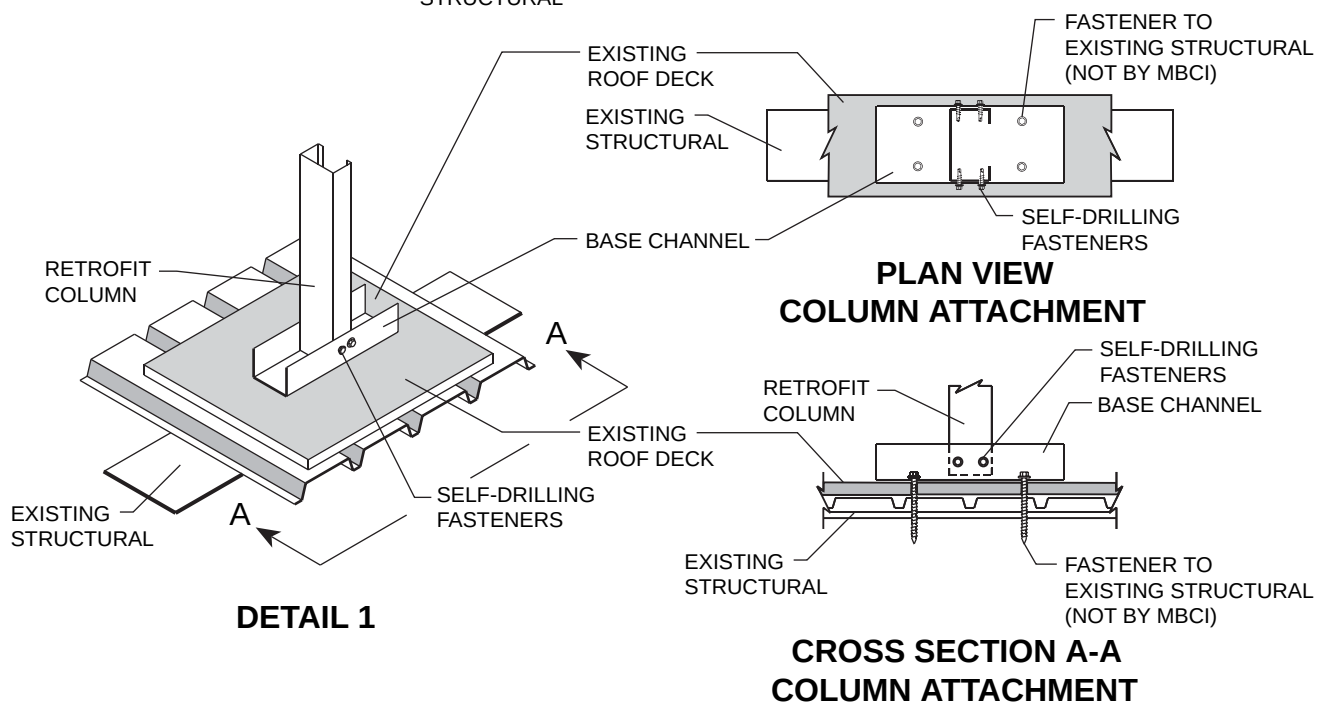
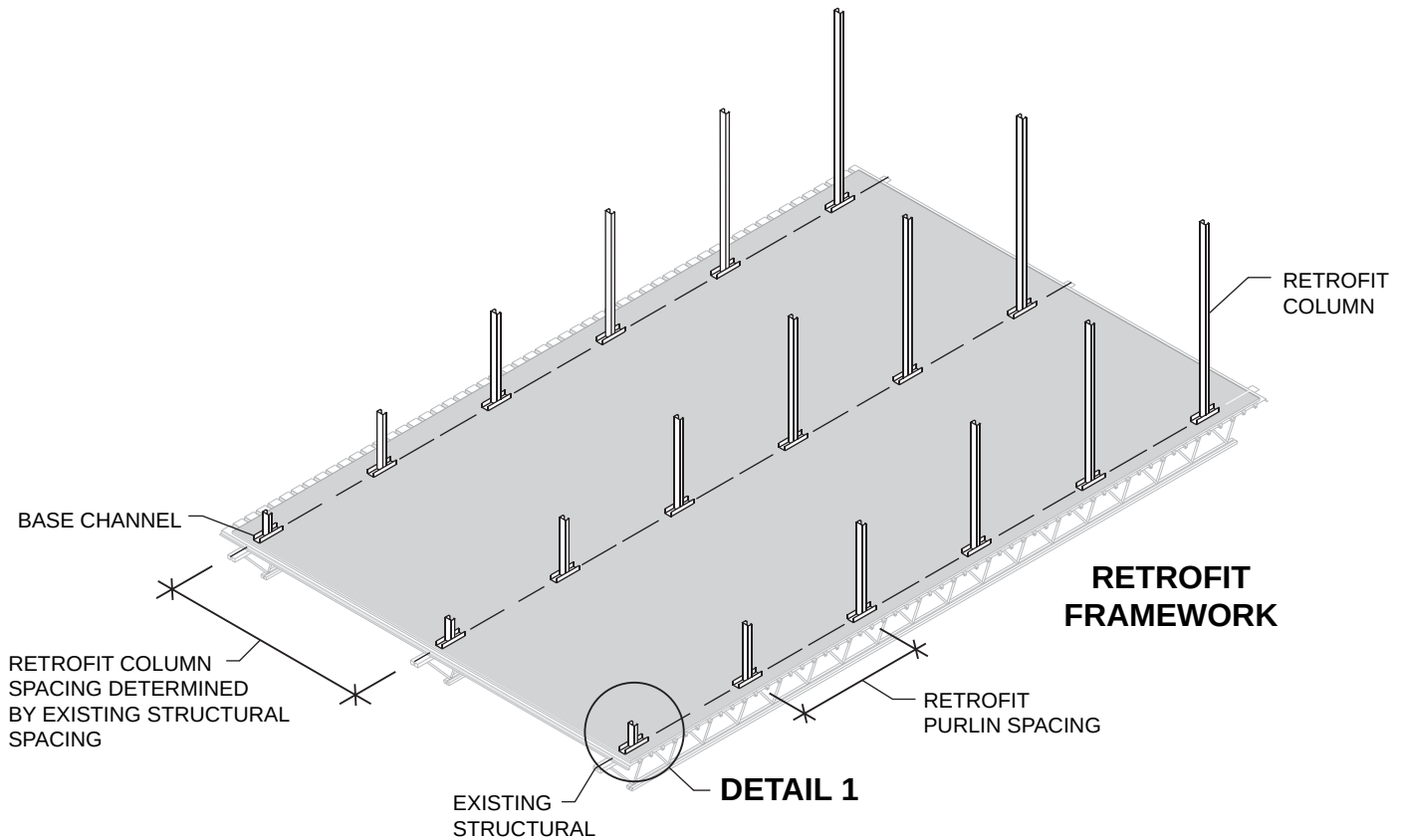
RETROFIT FRAMING OVER STRUCTURAL MEMBERS PARALLEL TO THE ROOF SLOPE (Base Channel Attachment)



DESIGN INFORMATION

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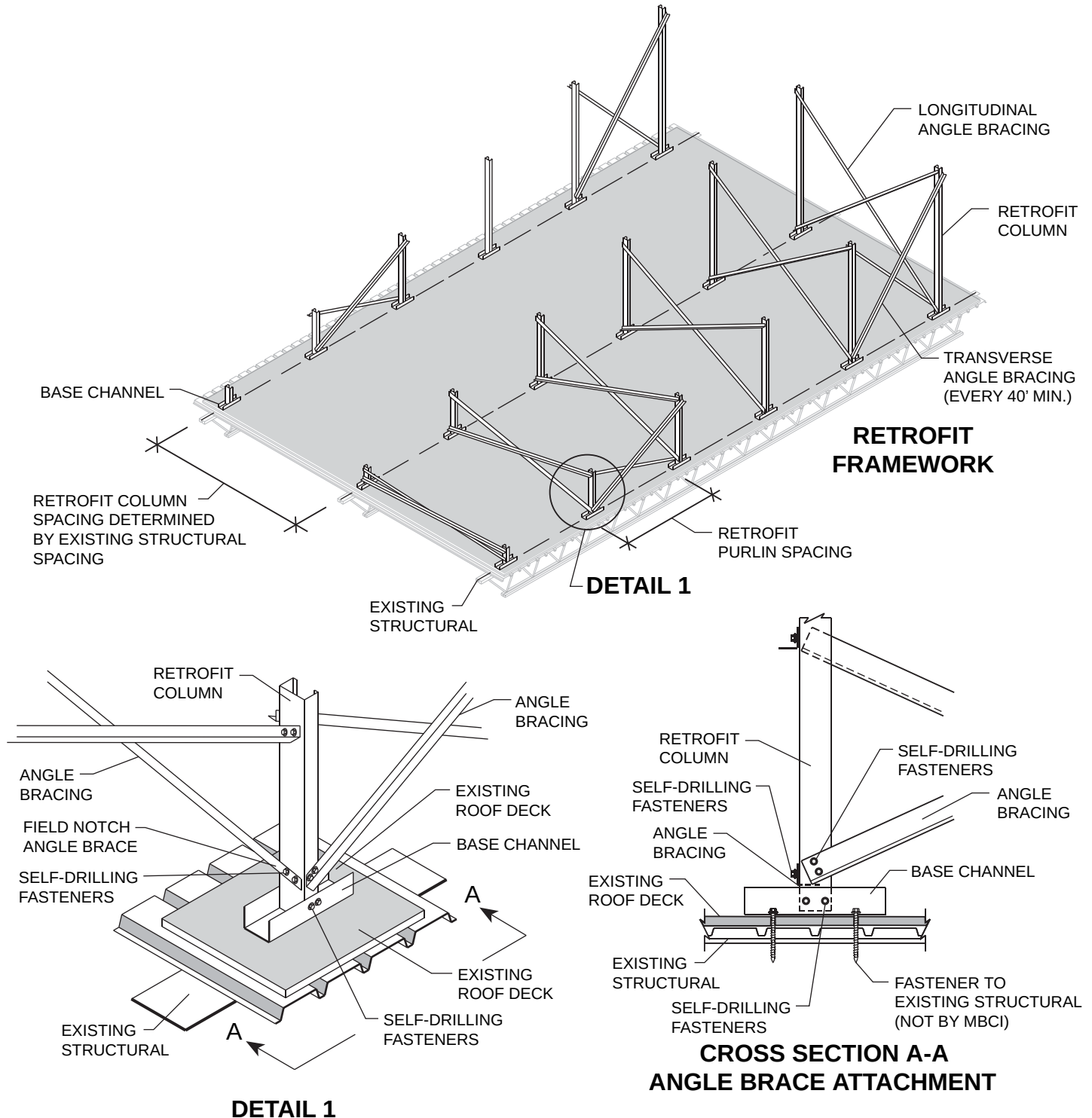
RETROFIT FRAMING OVER STRUCTURAL MEMBERS PARALLEL TO THE ROOF SLOPE (Column Attachment)



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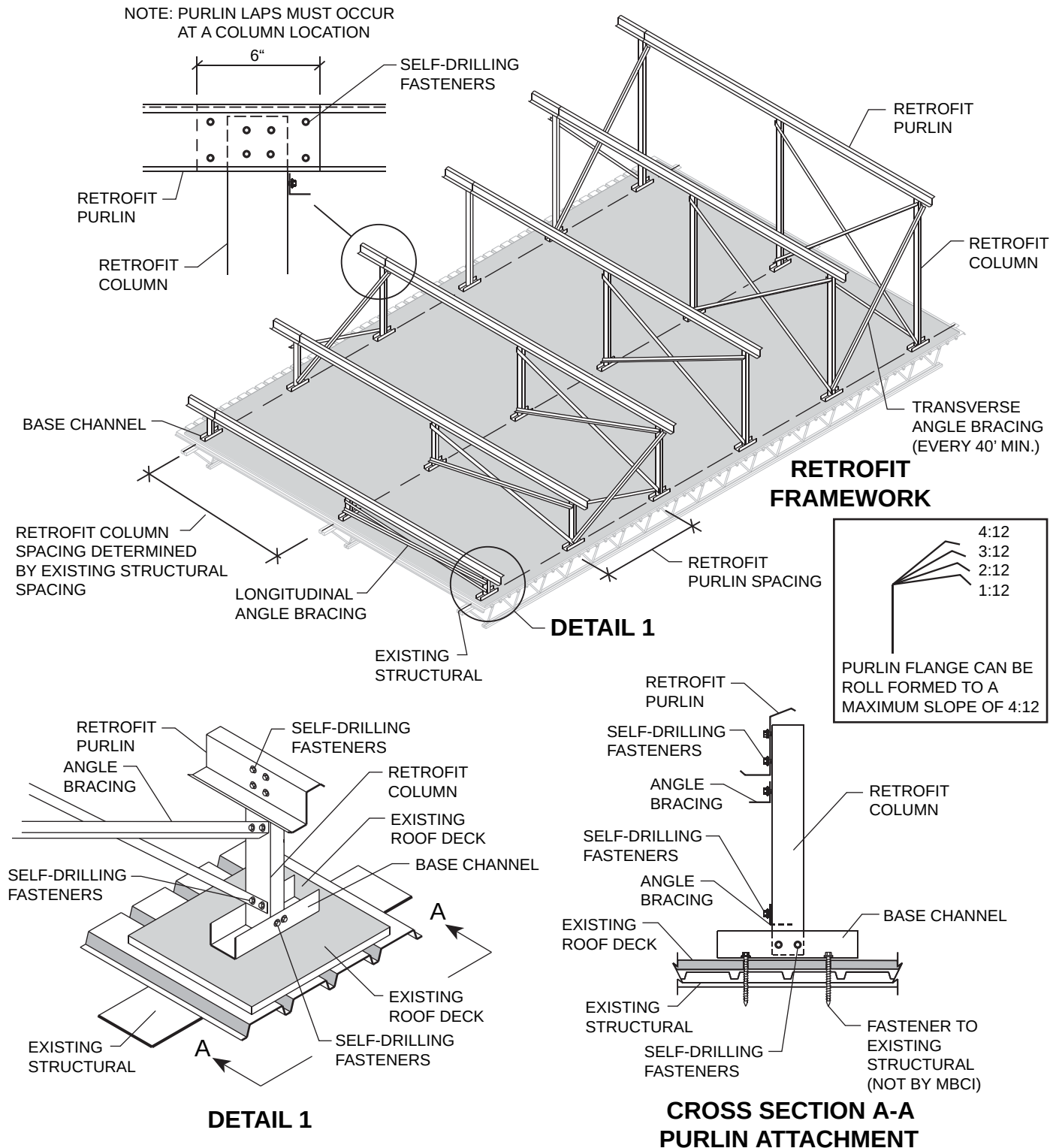
RETROFIT FRAMING OVER STRUCTURAL MEMBERS PARALLEL TO THE ROOF SLOPE ("X" Bracing Attachment)



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RETROFIT FRAMING OVER STRUCTURAL MEMBERS PARALLEL TO THE ROOF SLOPE (Purlin Attachment)



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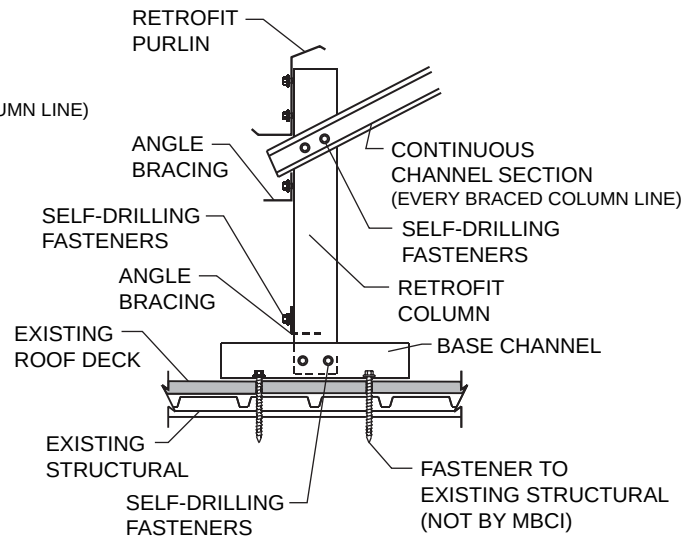
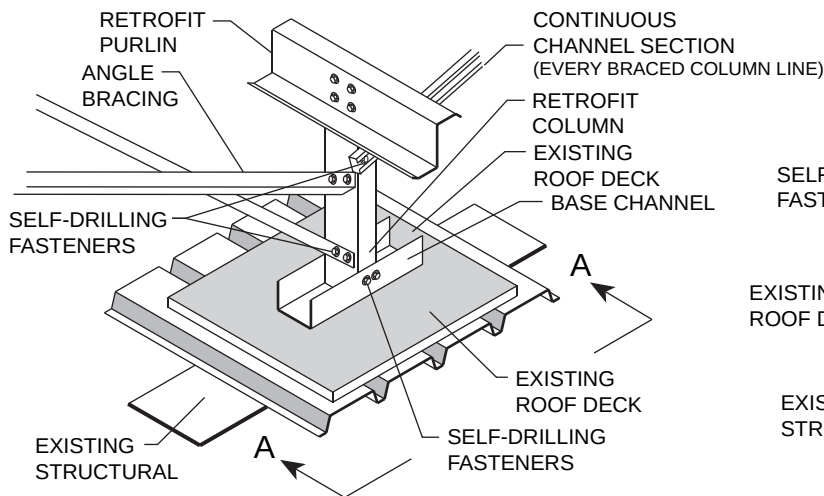
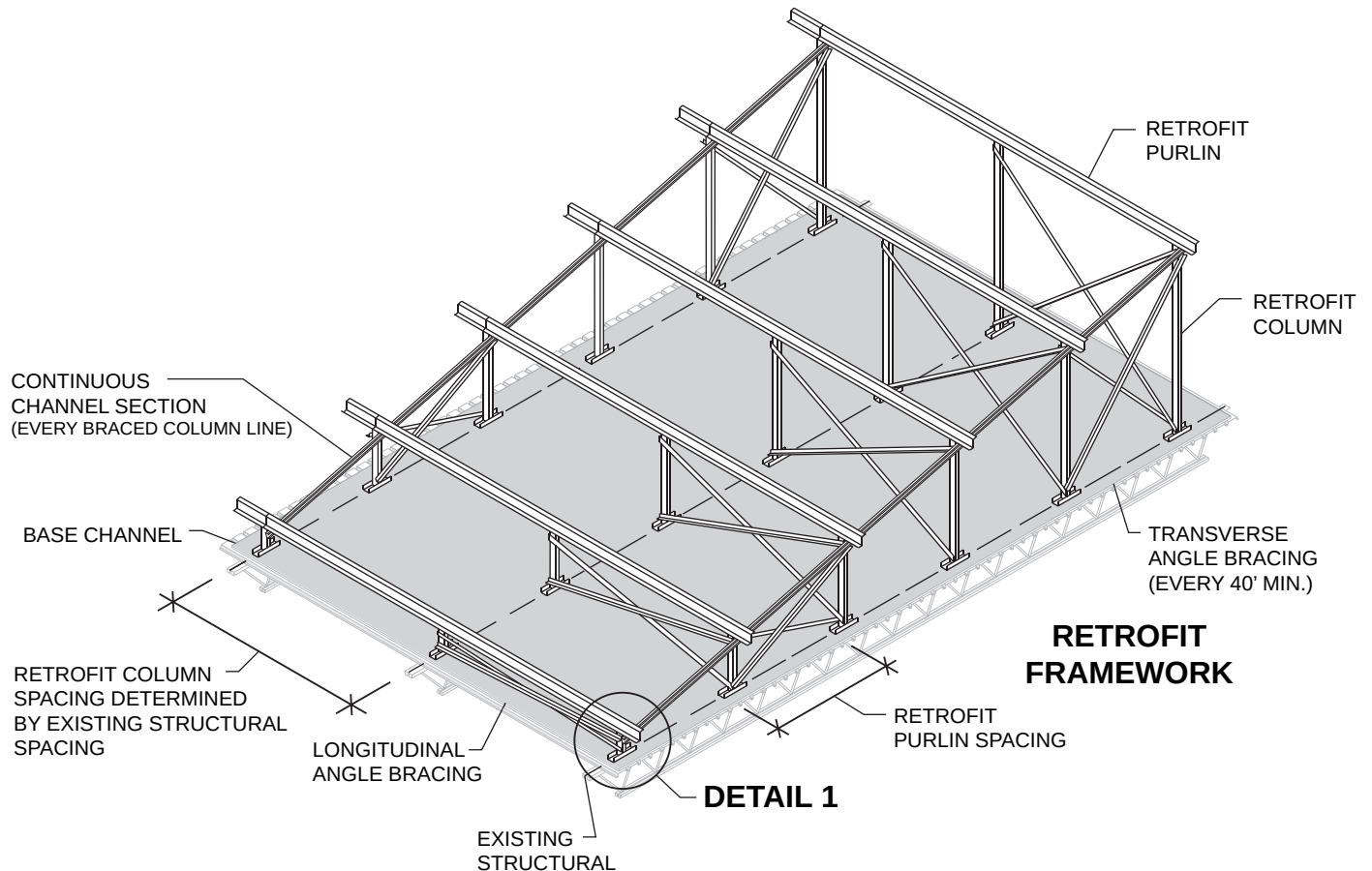
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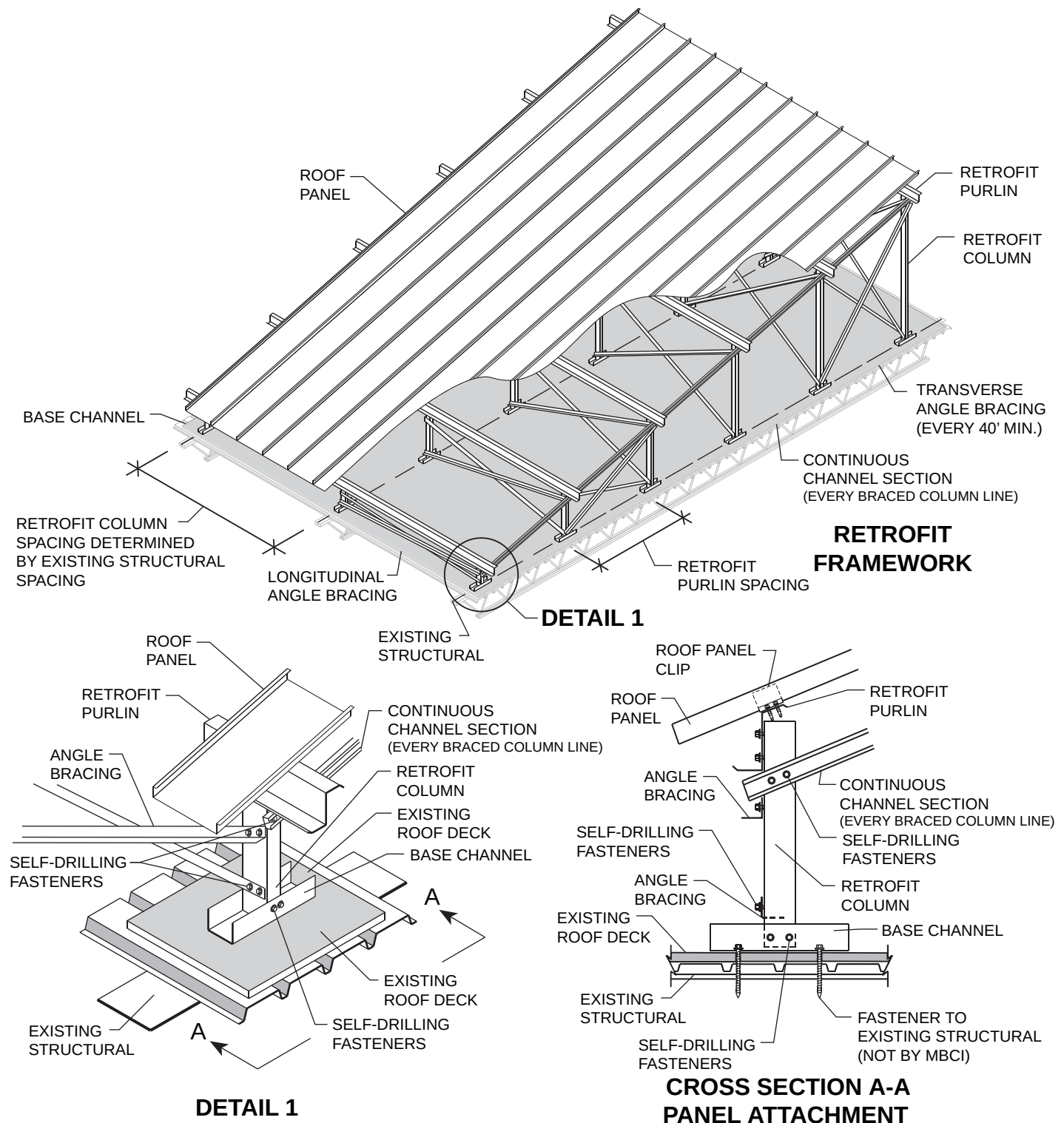
RETROFIT FRAMING OVER STRUCTURAL MEMBERS PARALLEL TO THE ROOF SLOPE (Strut Attachment)



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RETROFIT FRAMING OVER STRUCTURAL MEMBERS PARALLEL TO THE ROOF SLOPE (Panel Attachment)

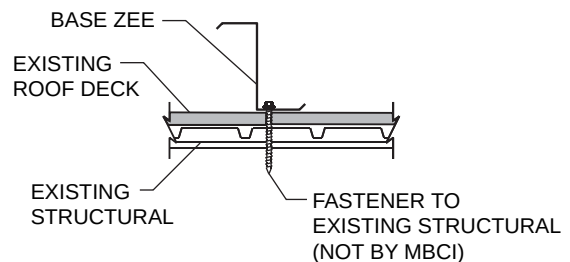
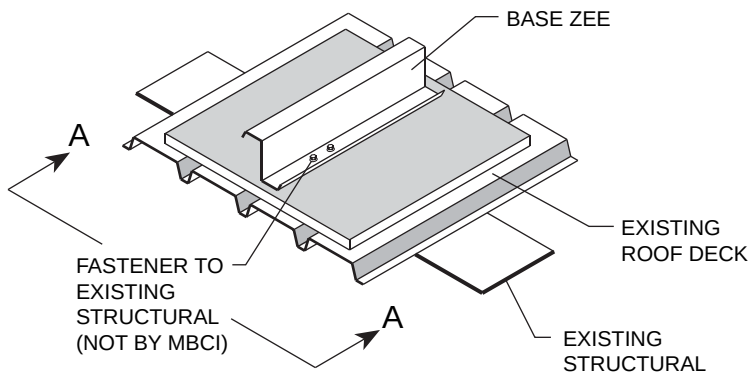
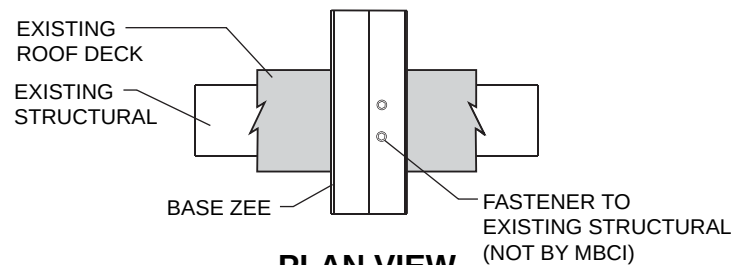
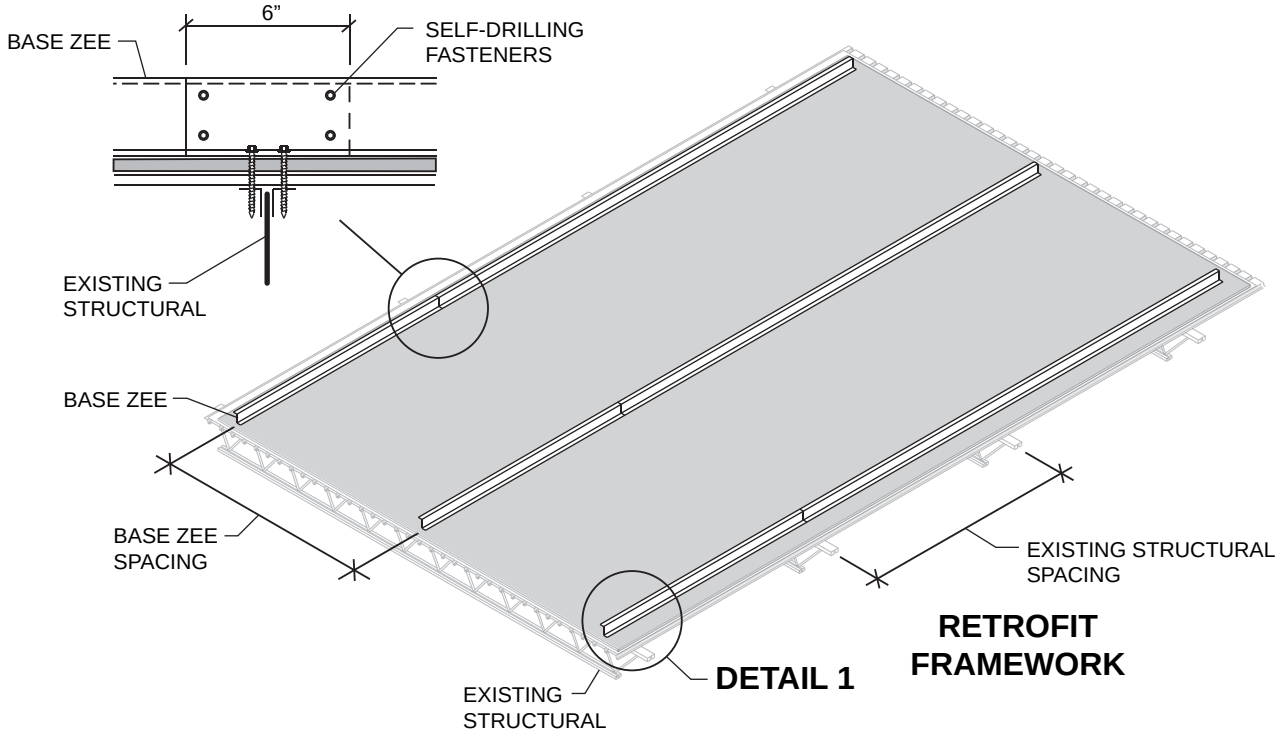


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DESIGN INFORMATION

RETROFIT FRAMING OVER STRUCTURAL MEMBERS PERPENDICULAR TO THE ROOF SLOPE (Base Zee Attachment)

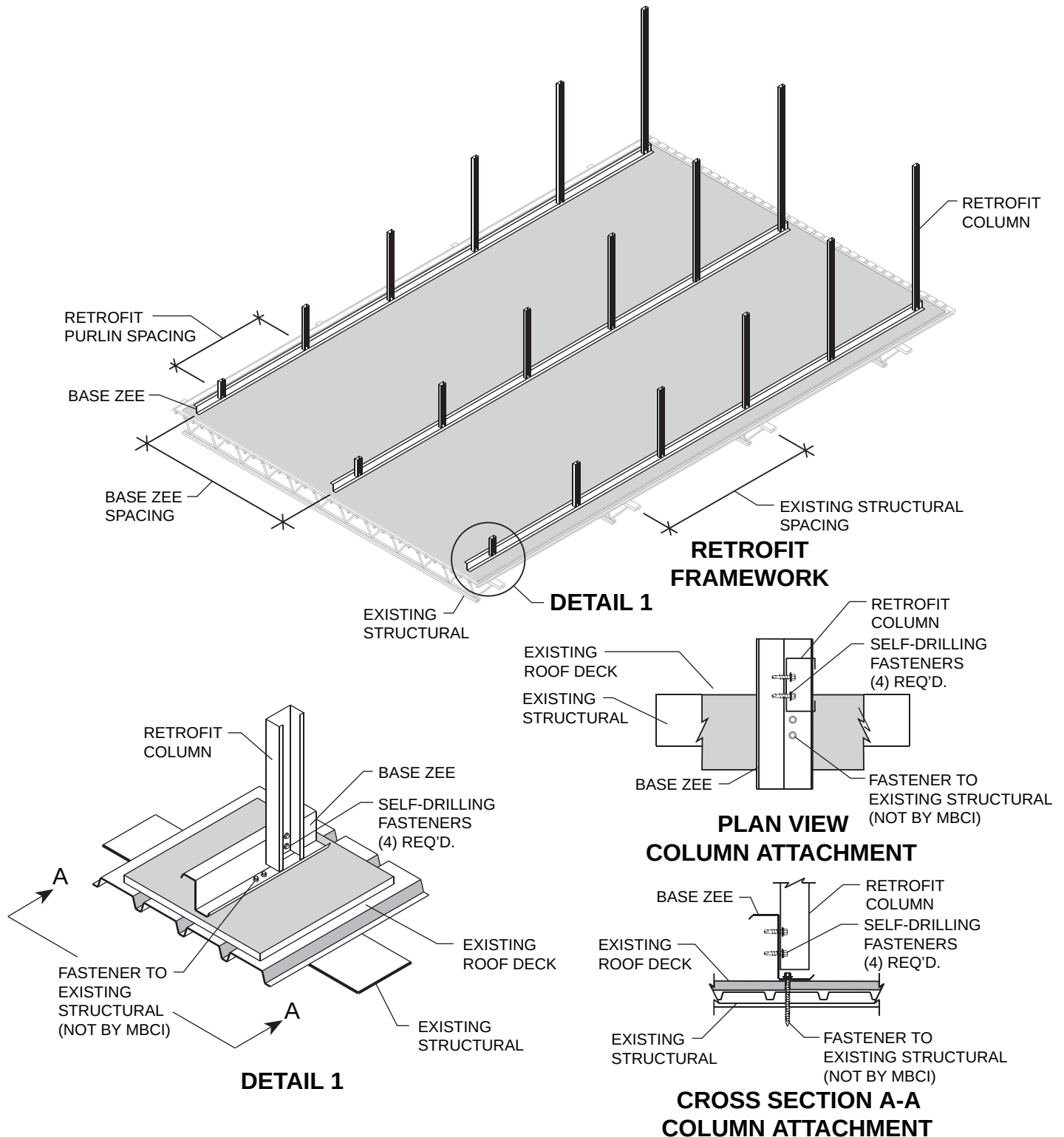
NOTE: BASE ZEE LAPS MUST
 OCCUR OVER A SUPPORT



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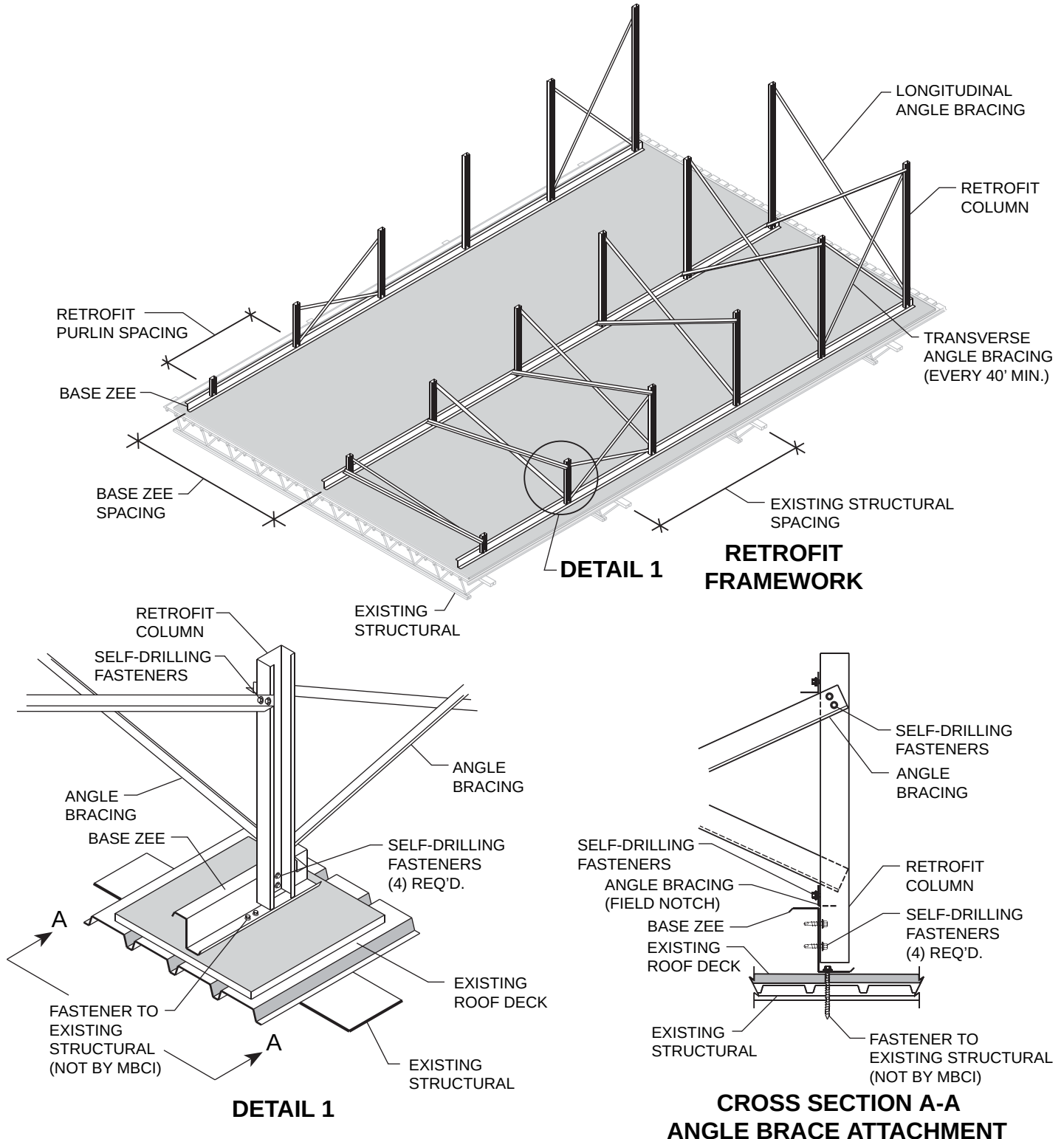
RETROFIT FRAMING OVER STRUCTURAL MEMBERS PERPENDICULAR TO THE ROOF SLOPE (Column Attachment)



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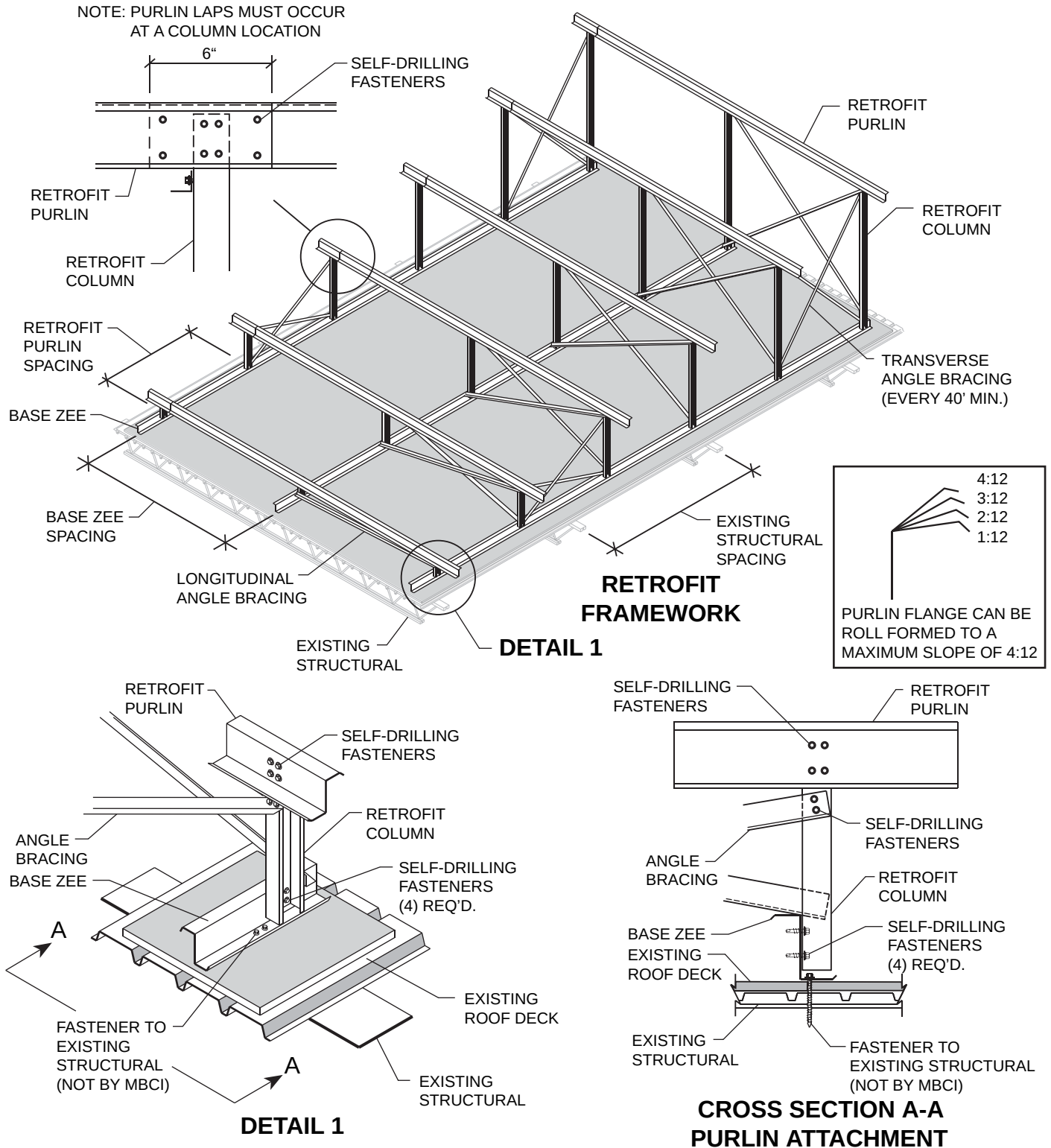
RETROFIT FRAMING OVER STRUCTURAL MEMBERS PERPENDICULAR TO THE ROOF SLOPE ("X" Bracing Attachment)



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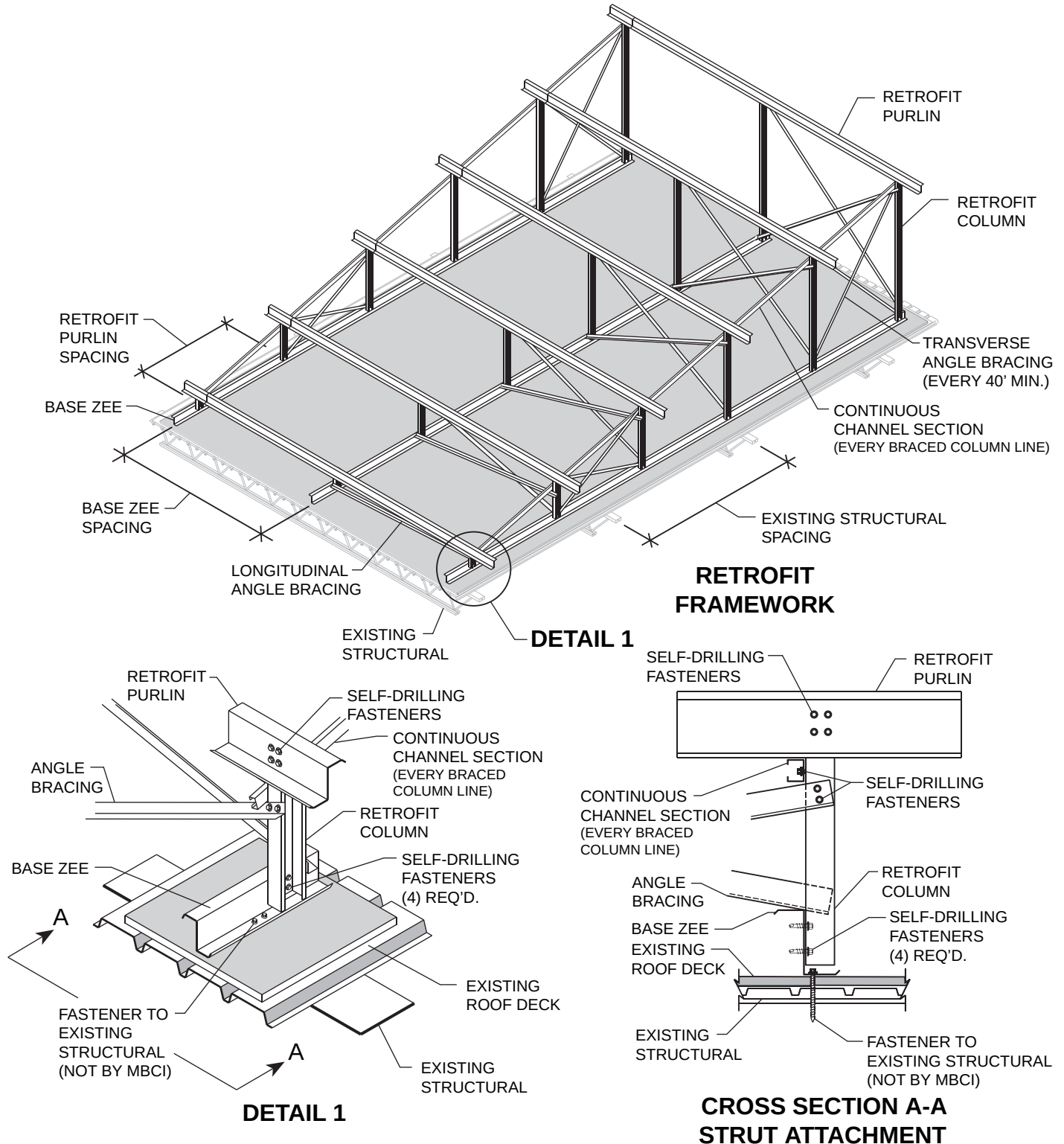
RETROFIT FRAMING OVER STRUCTURAL MEMBERS PERPENDICULAR TO THE ROOF SLOPE (Purlin Attachment)



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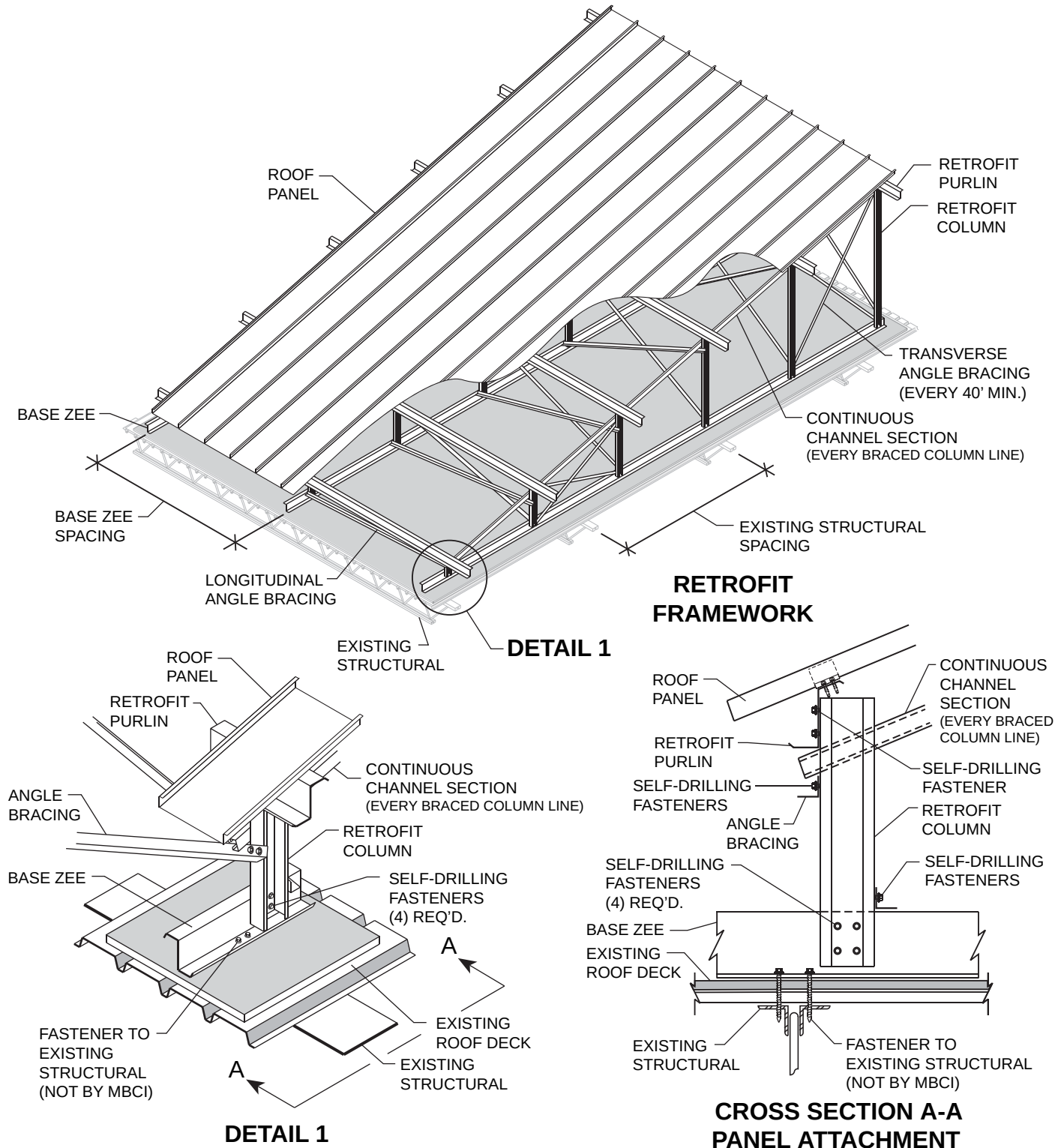
RETROFIT FRAMING OVER STRUCTURAL MEMBERS PERPENDICULAR TO THE ROOF SLOPE (Strut Attachment)



DESIGN INFORMATION

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RETROFIT FRAMING OVER STRUCTURAL MEMBERS PERPENDICULAR TO THE ROOF SLOPE (Panel Attachment)



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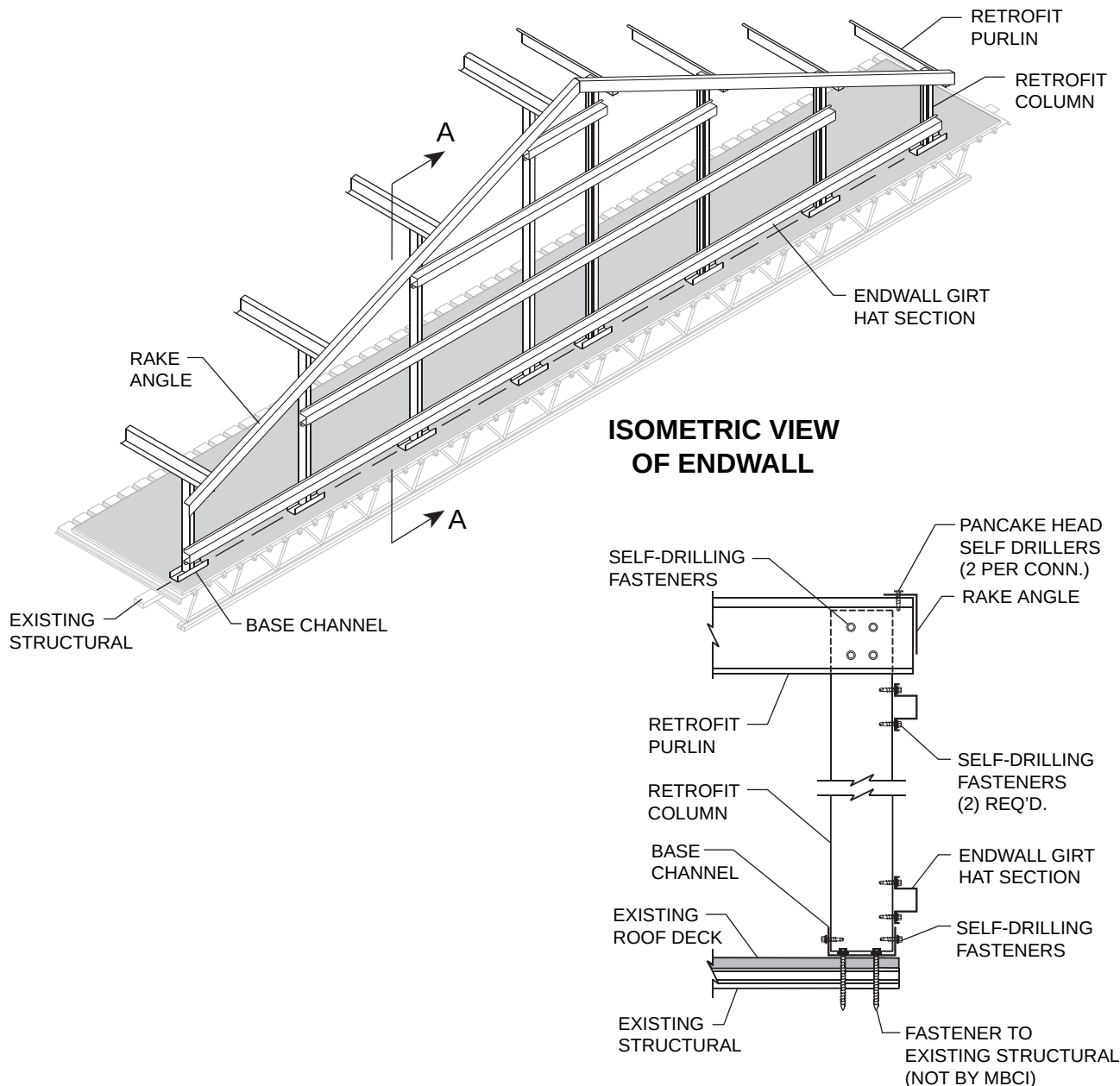
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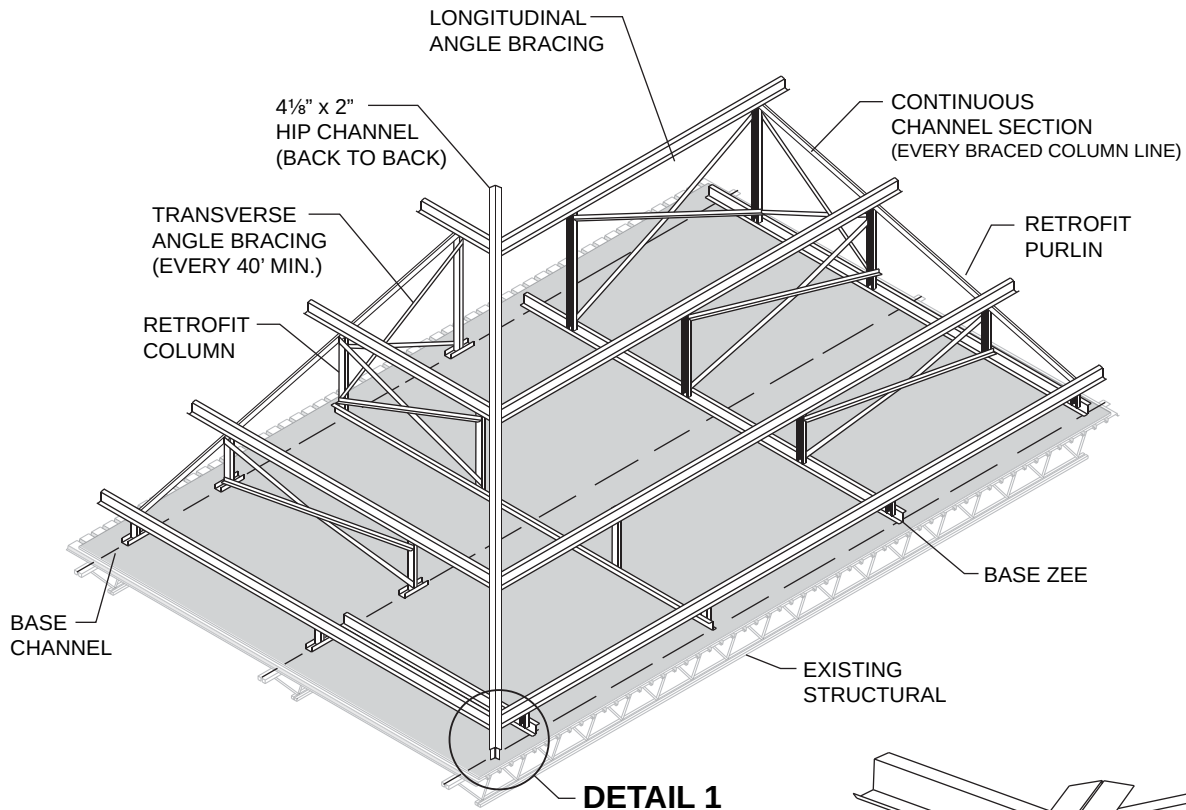
RETROFIT FRAMING OVER STRUCTURAL MEMBERS (Gable Endwall Girt Attachment)



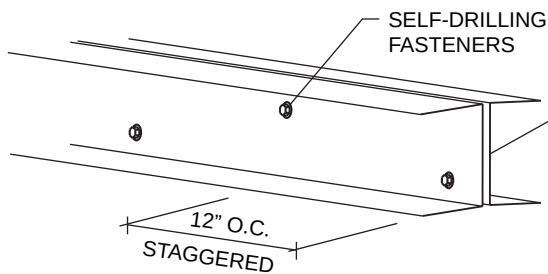
DESIGN INFORMATION

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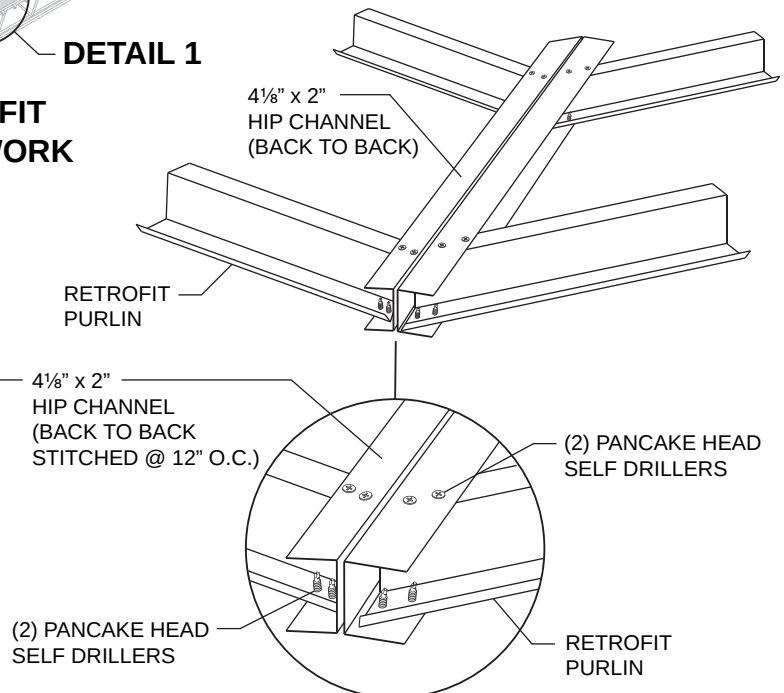
RETROFIT FRAMING FOR ROOF HIP (Back-to-Back Hip Channel Attachment)



RETROFIT FRAMEWORK



HIP CHANNEL BACK TO BACK



DETAIL 1

Houston, TX 877/713-6224
 Adel, GA 888/446-6224
 Atlanta, GA 877/512-6224
 Atwater, CA 800/829-9324
 Dallas, TX 800/653-6224
 Indianapolis, IN 800/735-6224

Lubbock, TX 800/758-6224
 Memphis, TN 800/206-6224
 Oklahoma City, OK 800/597-6224
 Omaha, NE 800/458-6224
 Phoenix, AZ 888/533-6224
 Richmond, VA 800/729-6224

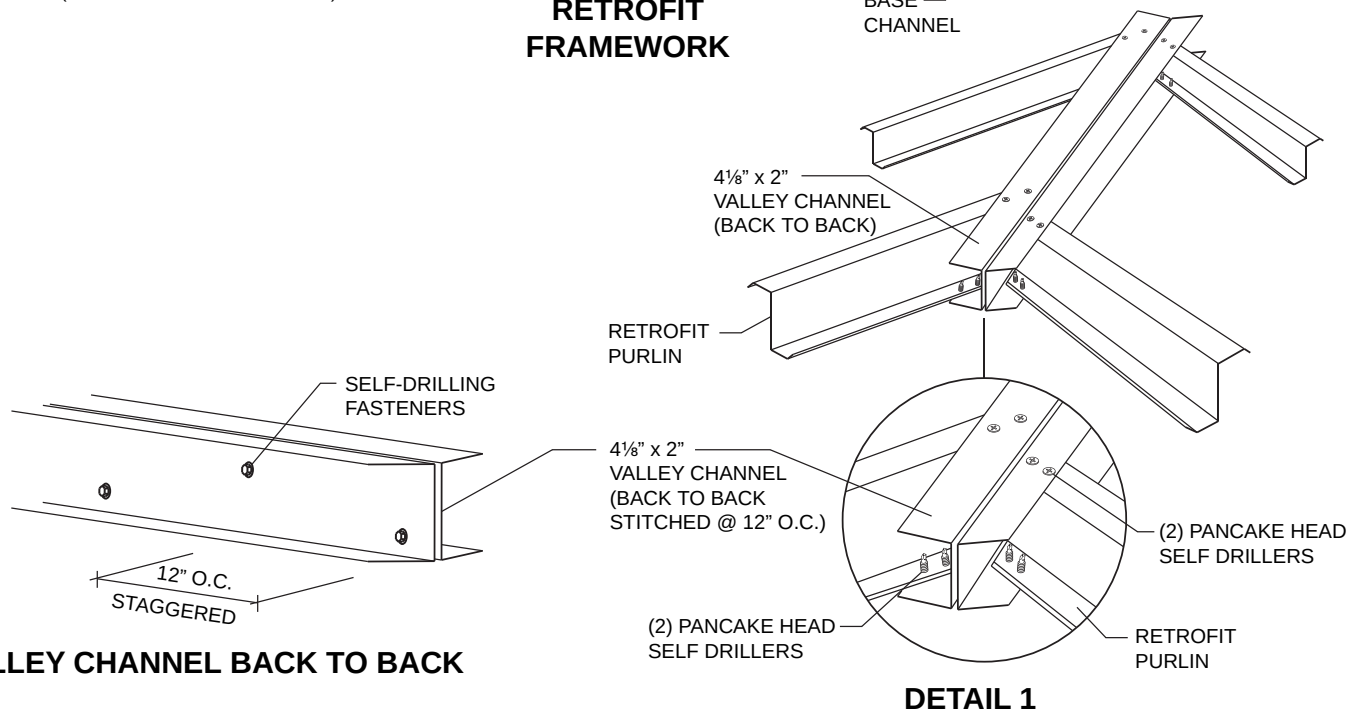
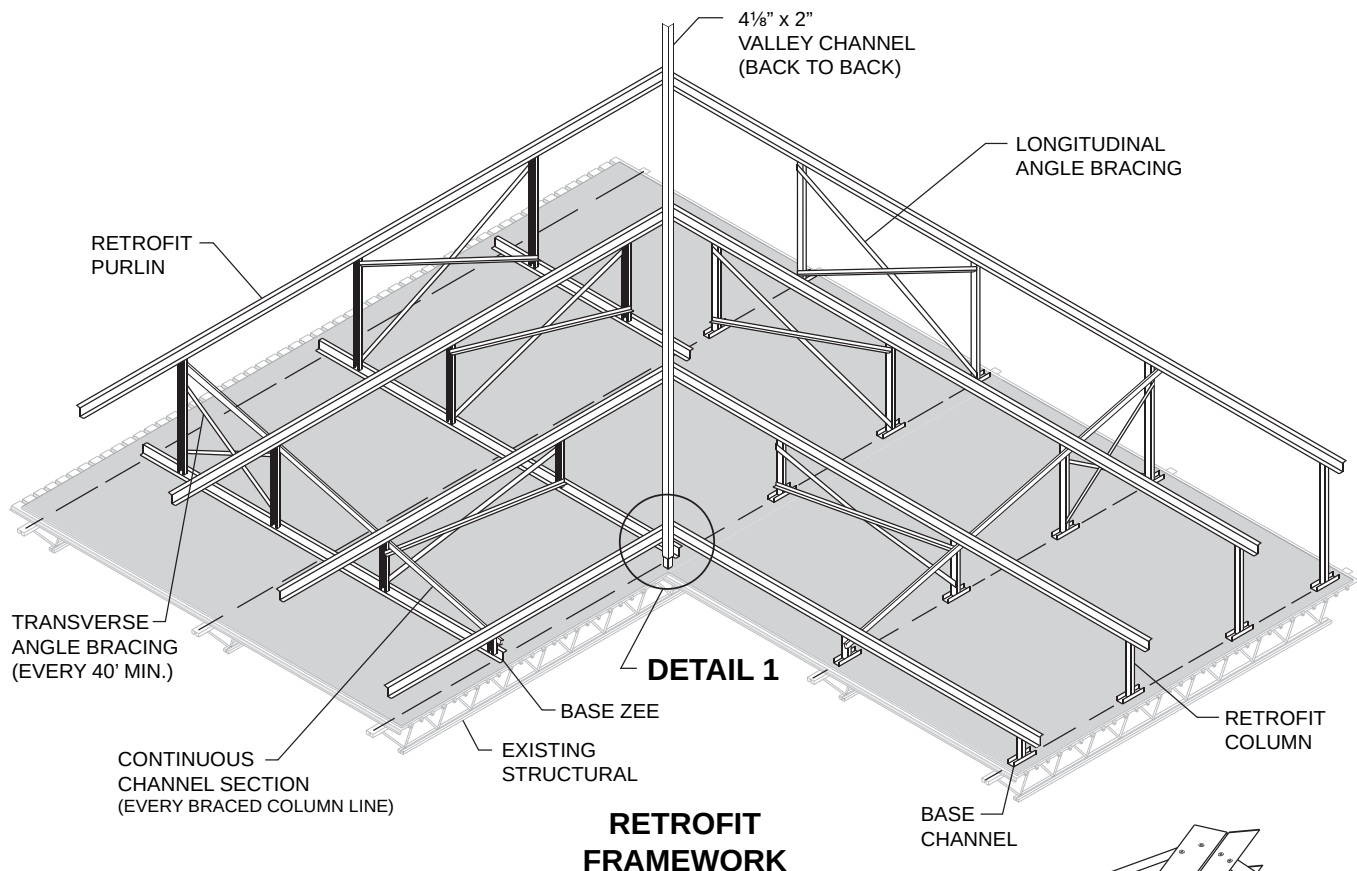
Rome, NY 800/559-6224
 Salt Lake City, UT 800/874-2404
 San Antonio, TX 800/598-6224
 Tampa, FL Sales Office 800/359-6224



NuRoof®

DESIGN INFORMATION

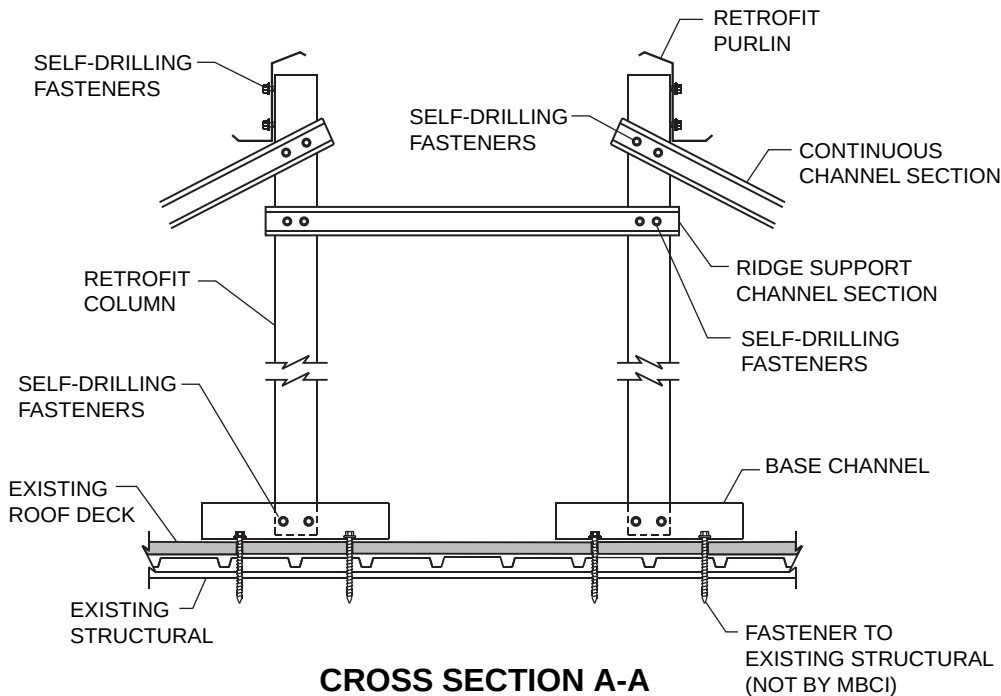
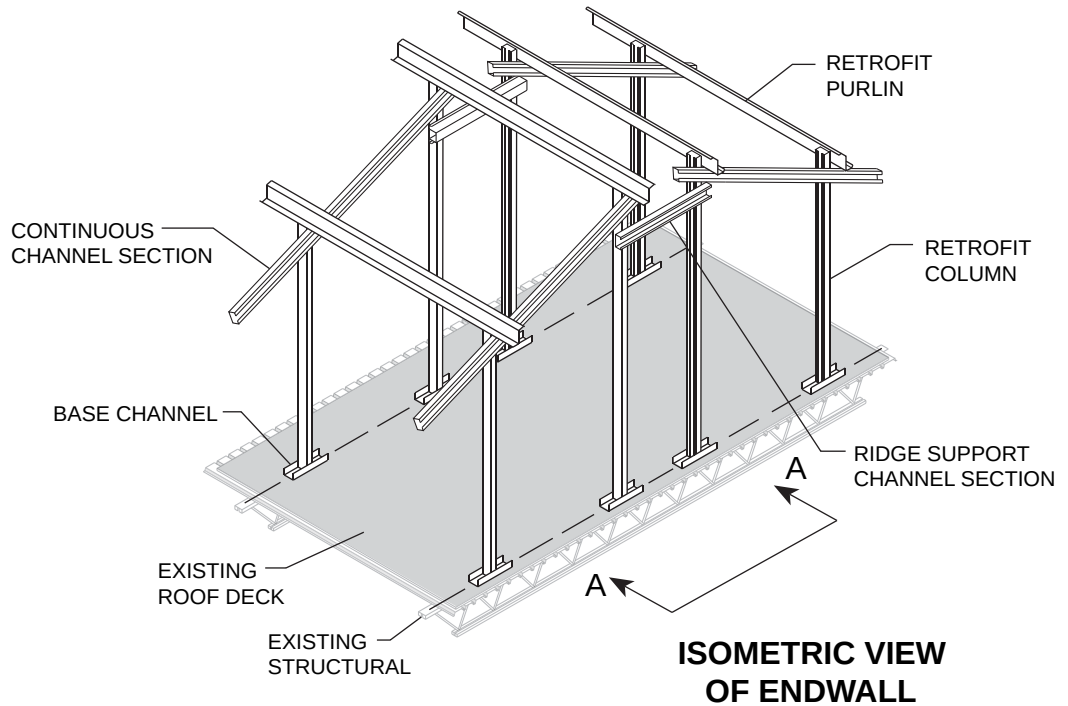
RETROFIT FRAMING FOR ROOF VALLEY (Back-to-Back Valley Channel Attachment)



DESIGN INFORMATION

NuRoof[®]

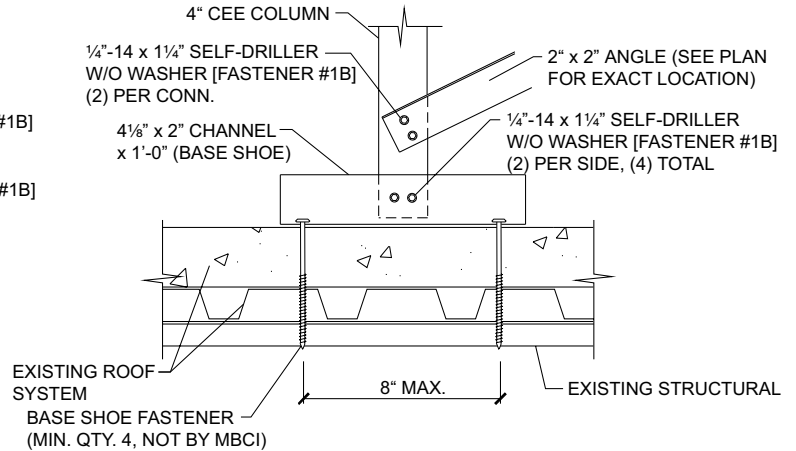
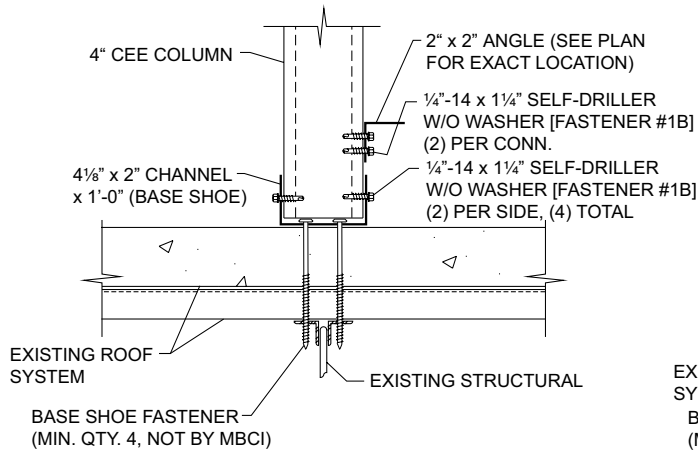
RETROFIT FRAMING FOR ROOF RIDGE (Peak Framing Attachment)



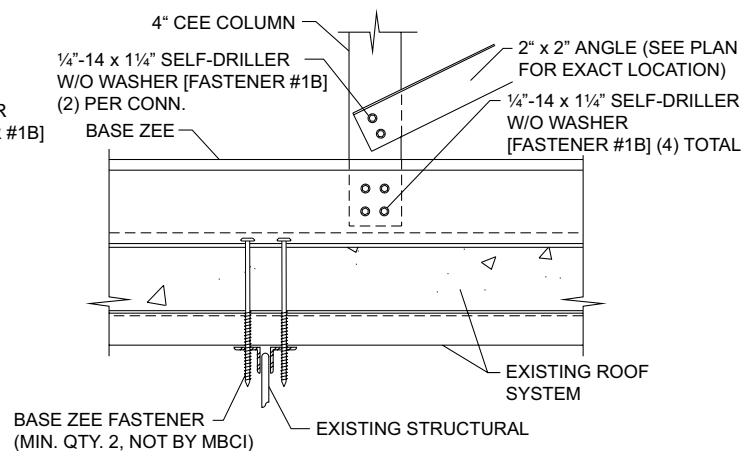
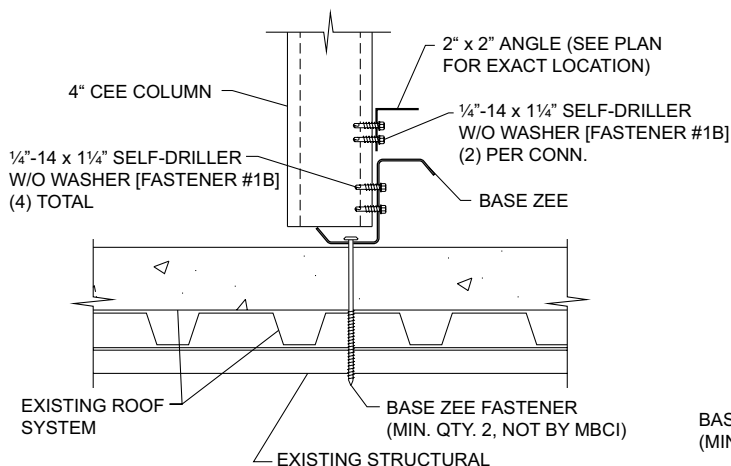
NuRoof®

DETAILS

BASE CHANNEL CONNECTION WITH COLUMN ATTACHMENT (Flange Connection)



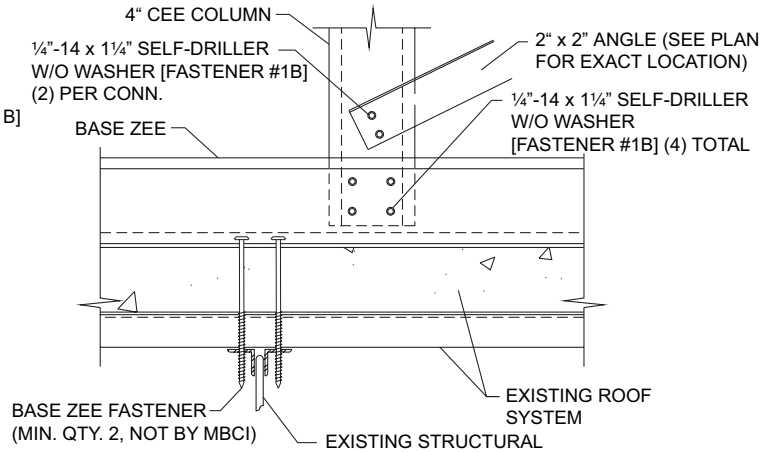
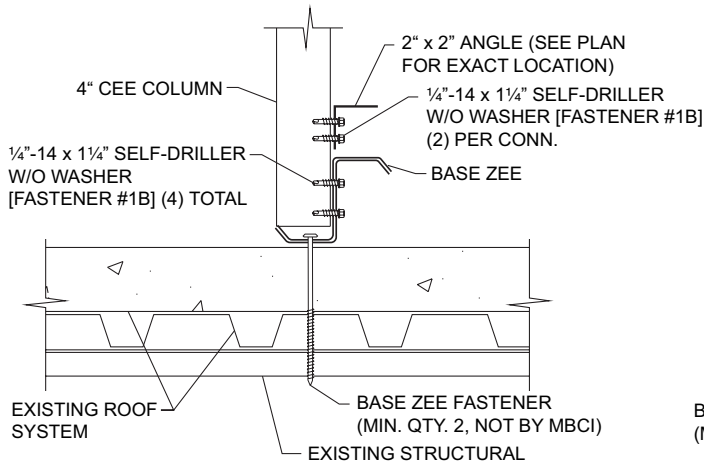
BASE ZEE CONNECTION WITH COLUMN ATTACHMENT (Flange Connection)



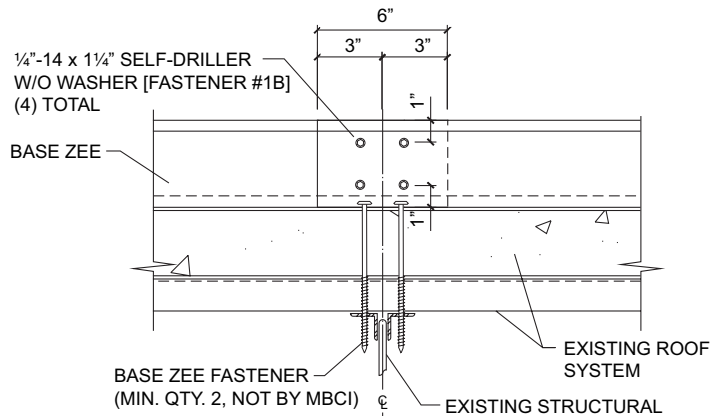
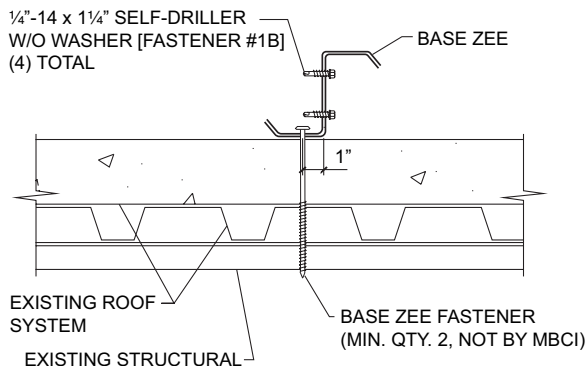
DETAILS

NuRoof®

BASE ZEE CONNECTION WITH COLUMN ATTACHMENT (Web Connection)



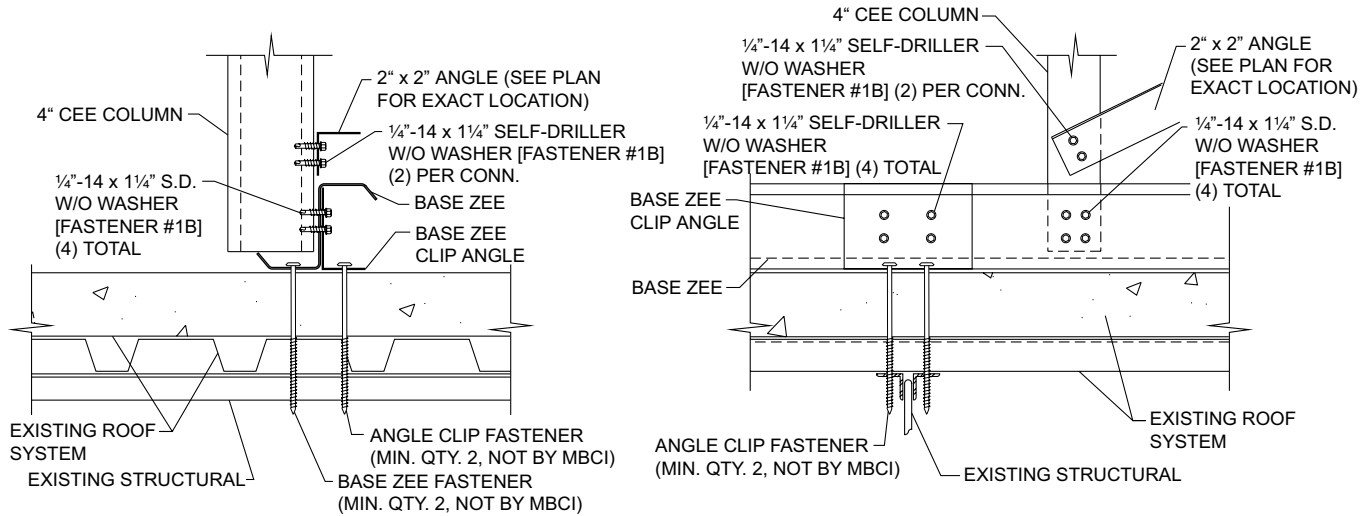
BASE ZEE CONNECTION (Lap Connection)



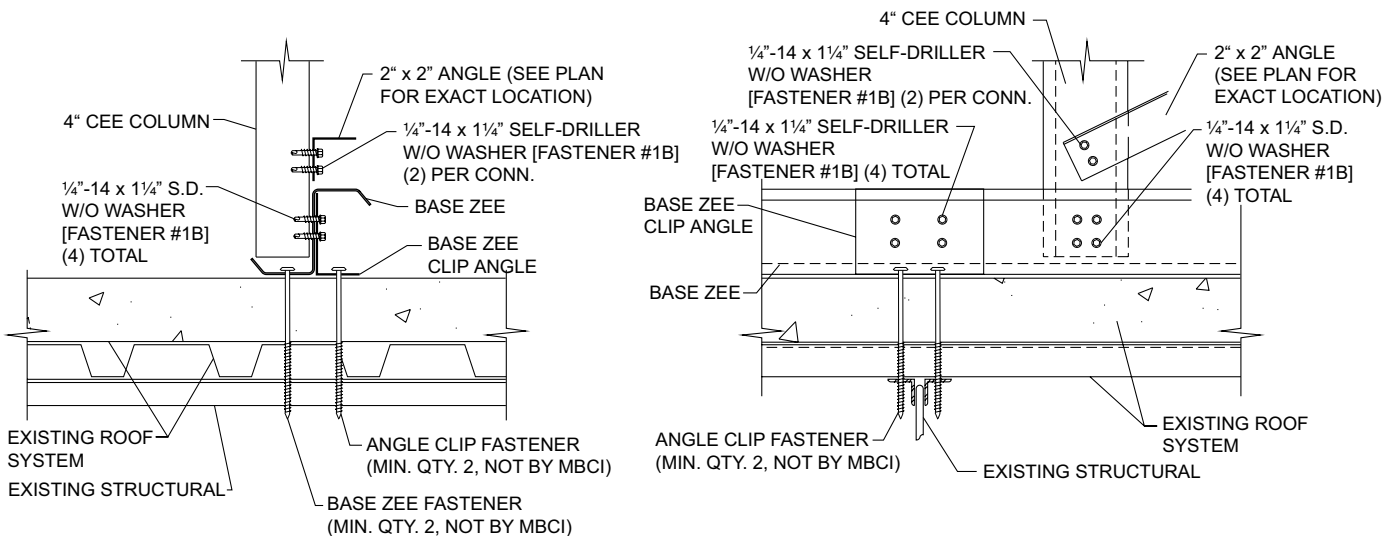
NuRoof®

DETAILS

HIGH STRENGTH BASE ZEE-CLIP ANGLE CONNECTION WITH COLUMN ATTACHMENT (Flange Connection)



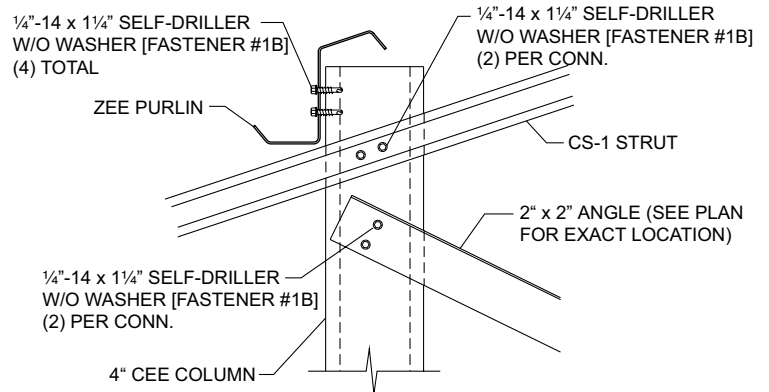
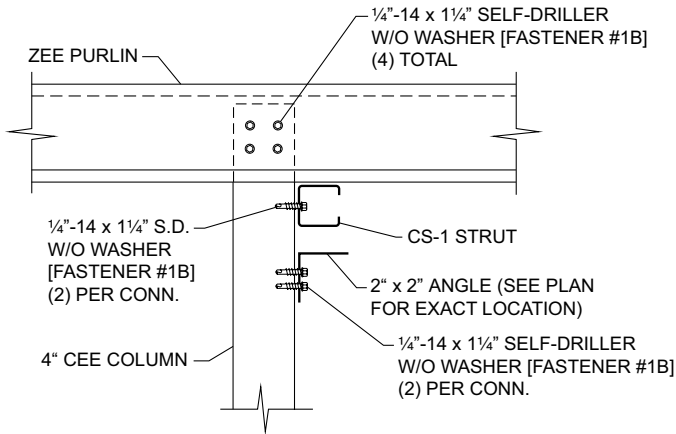
HIGH STRENGTH BASE ZEE-CLIP ANGLE CONNECTION WITH COLUMN ATTACHMENT (Web Connection)



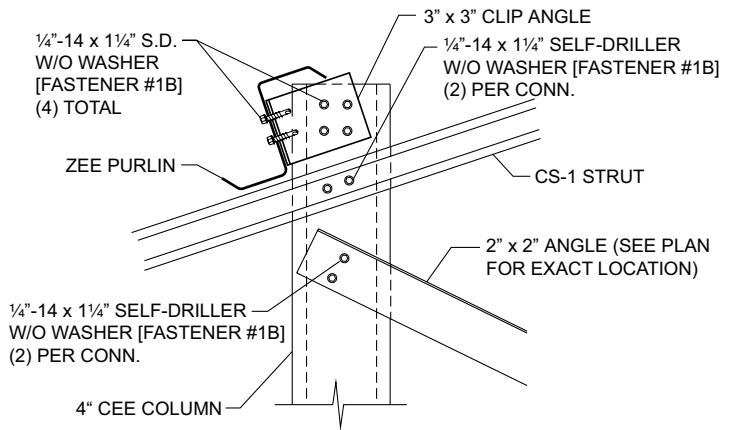
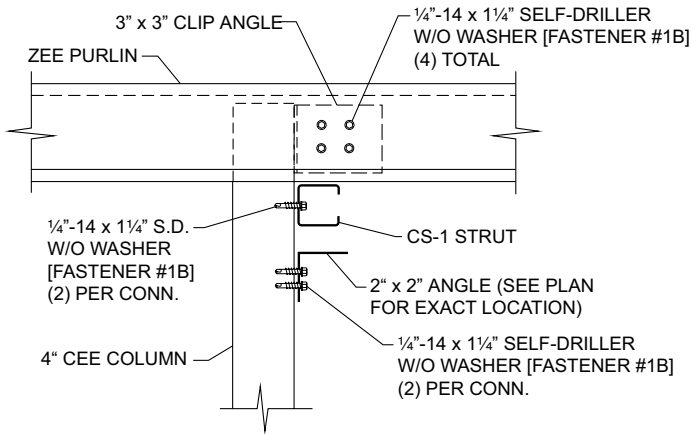
DETAILS

NuRoof®

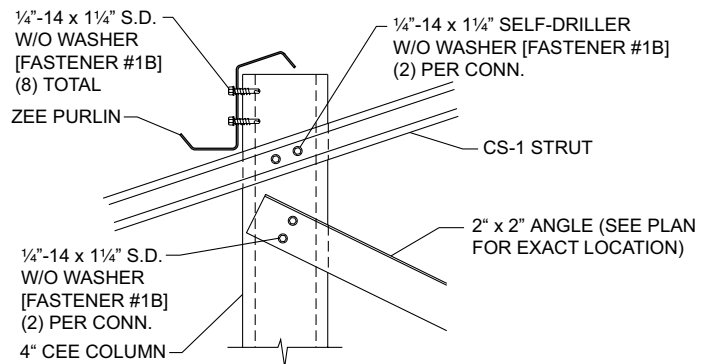
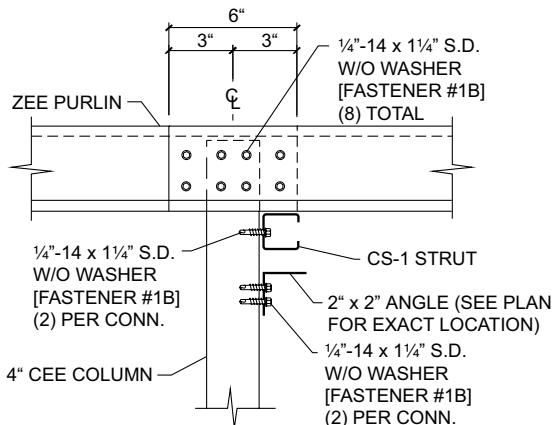
PURLIN TO COLUMN ATTACHMENT (Flange Connection)



PURLIN TO COLUMN ATTACHMENT (Flange Connection With Purlin Clip)



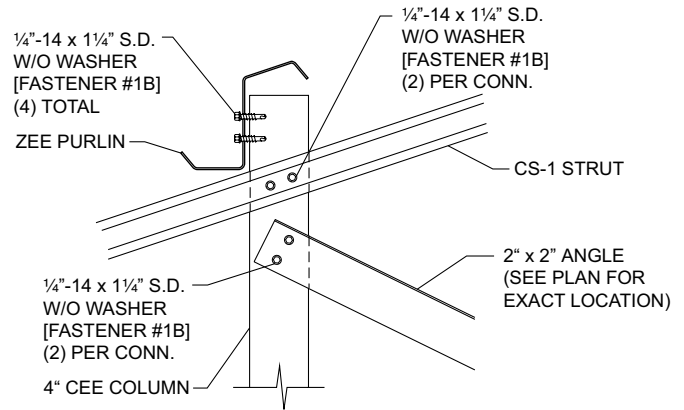
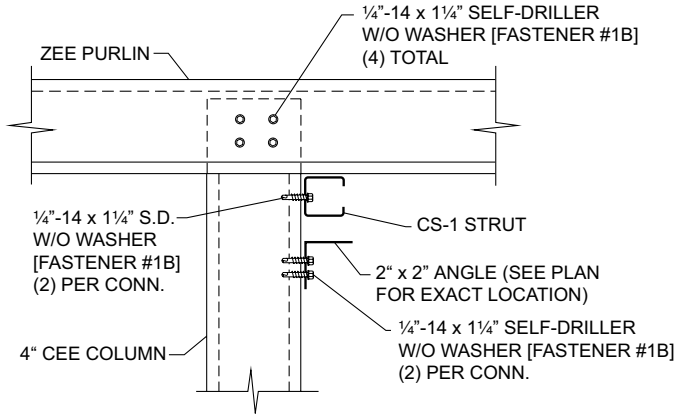
PURLIN TO COLUMN ATTACHMENT (Flange Connection at Purlin Lap)



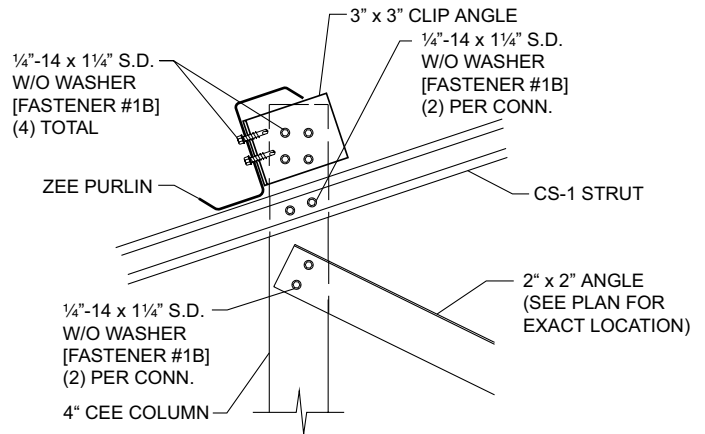
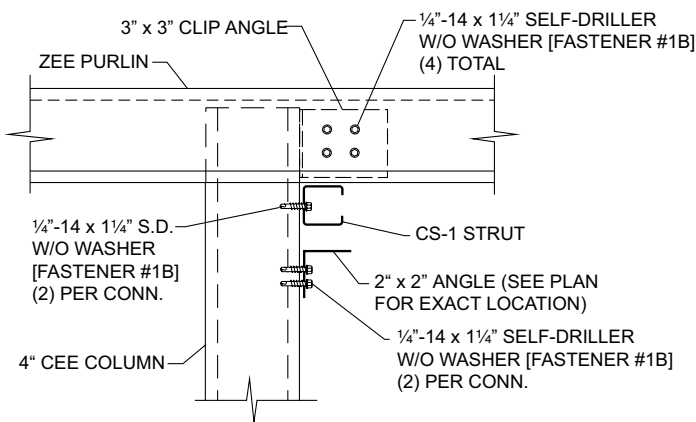
NuRoof[®]

DETAILS

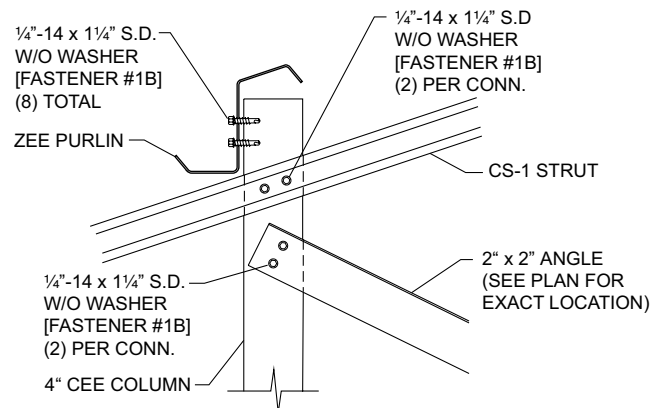
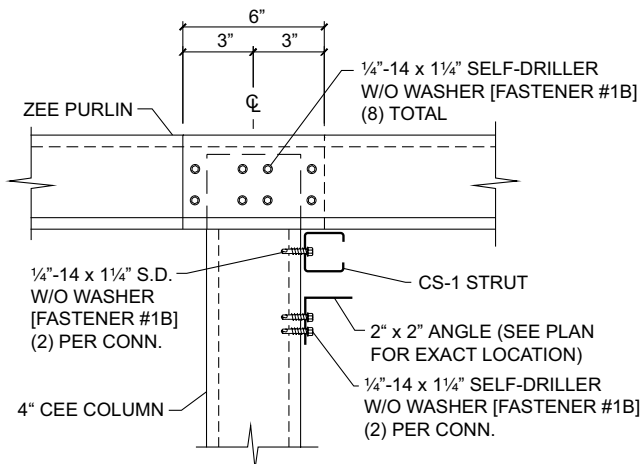
PURLIN TO COLUMN ATTACHMENT (Web Connection)



PURLIN TO COLUMN ATTACHMENT (Web Connection With Purlin Clip)



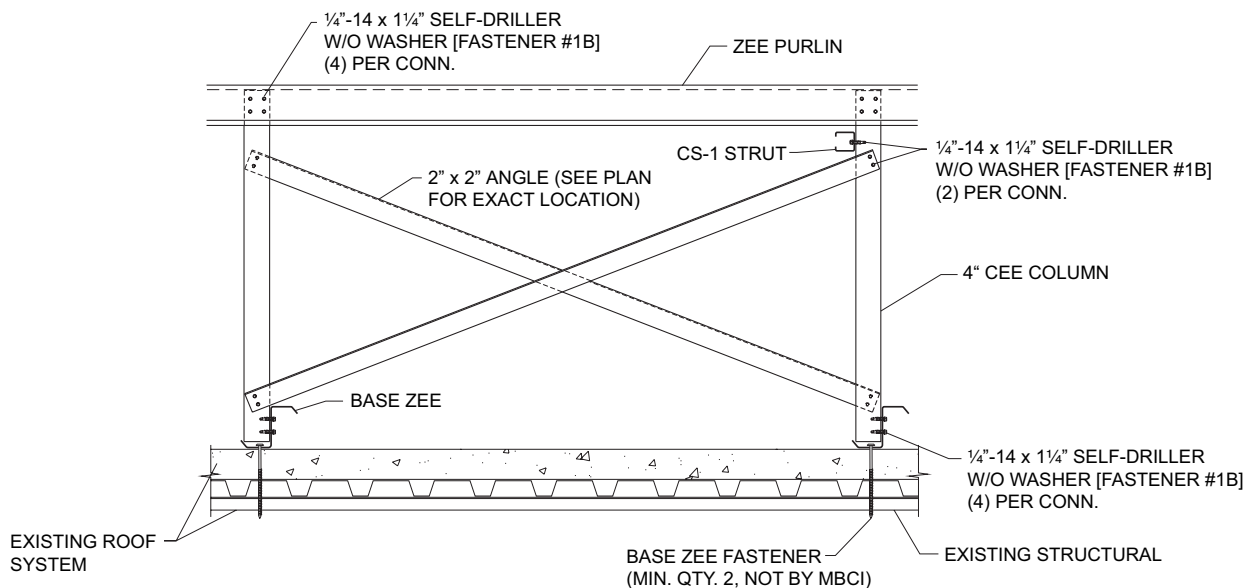
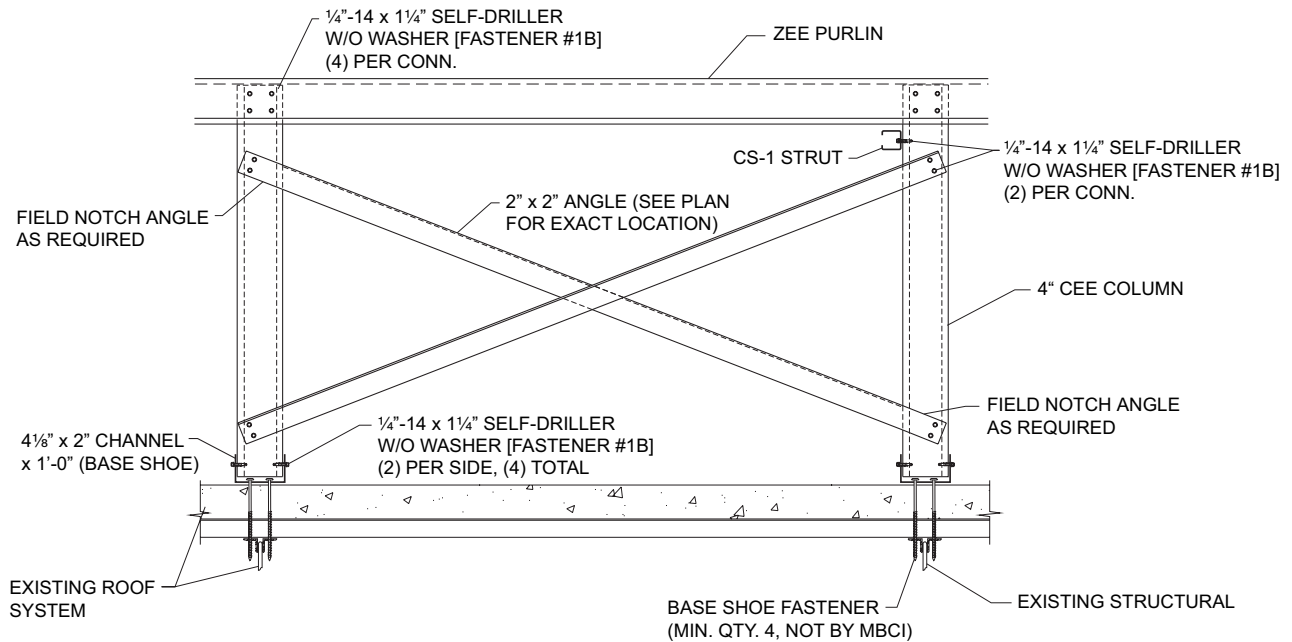
PURLIN TO COLUMN ATTACHMENT (Web Connection at Purlin Lap)



DETAILS

NuRoof®

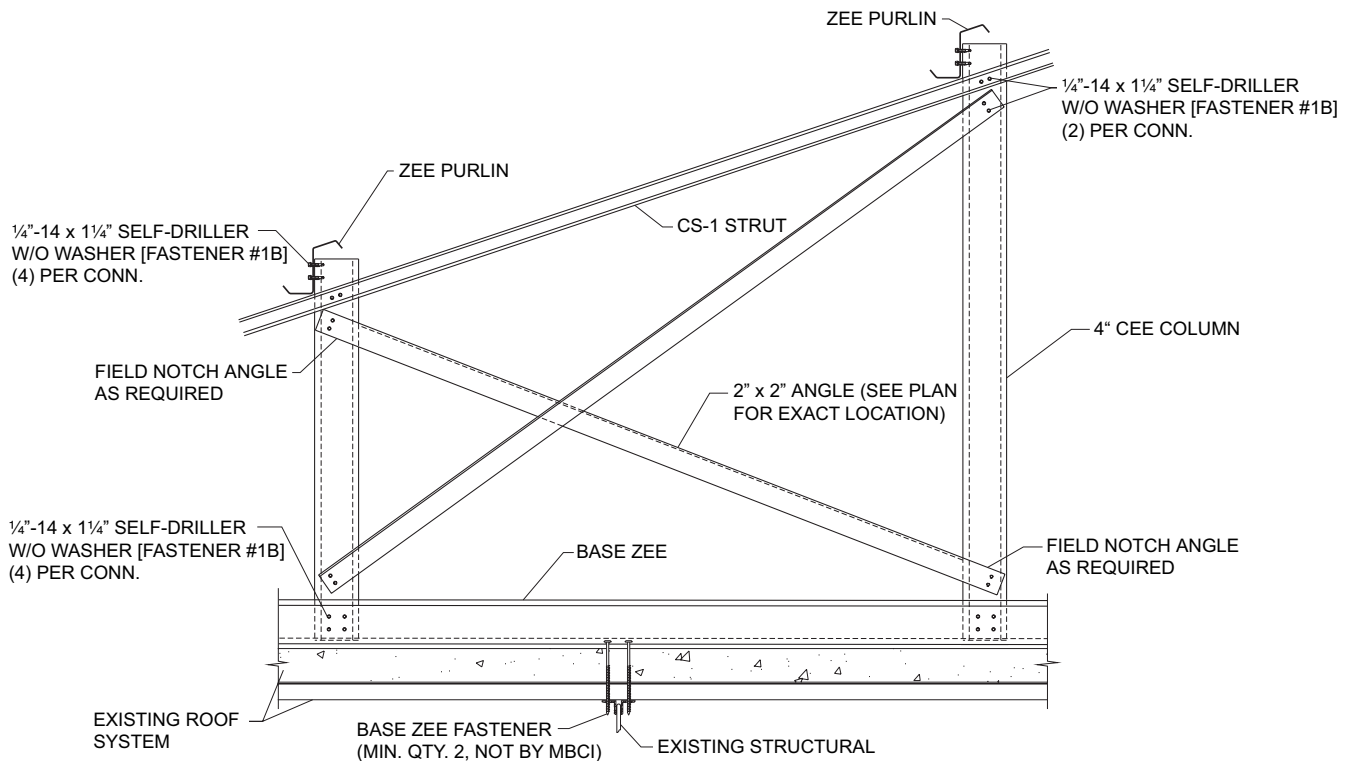
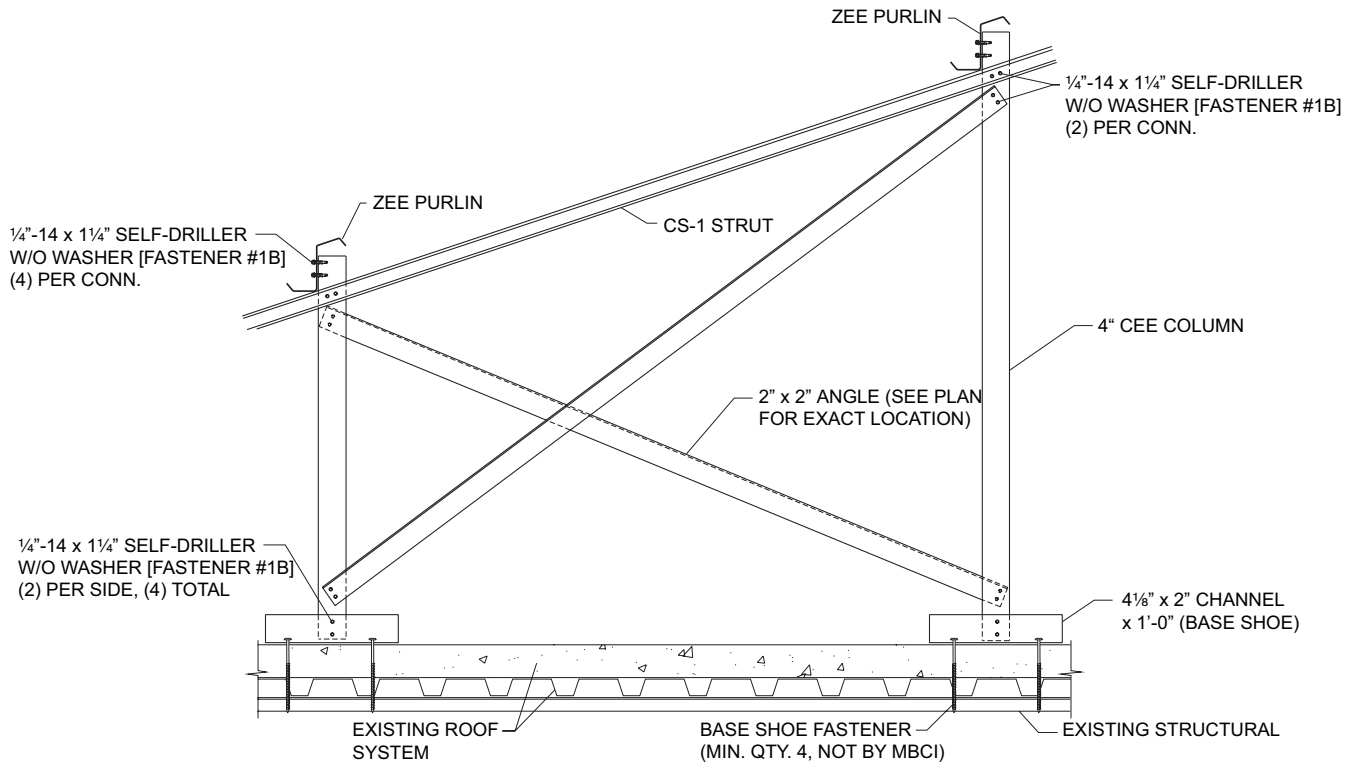
LONGITUDINAL ANGLE BRACING (Parallel to Purlins)



NuRoof®

DETAILS

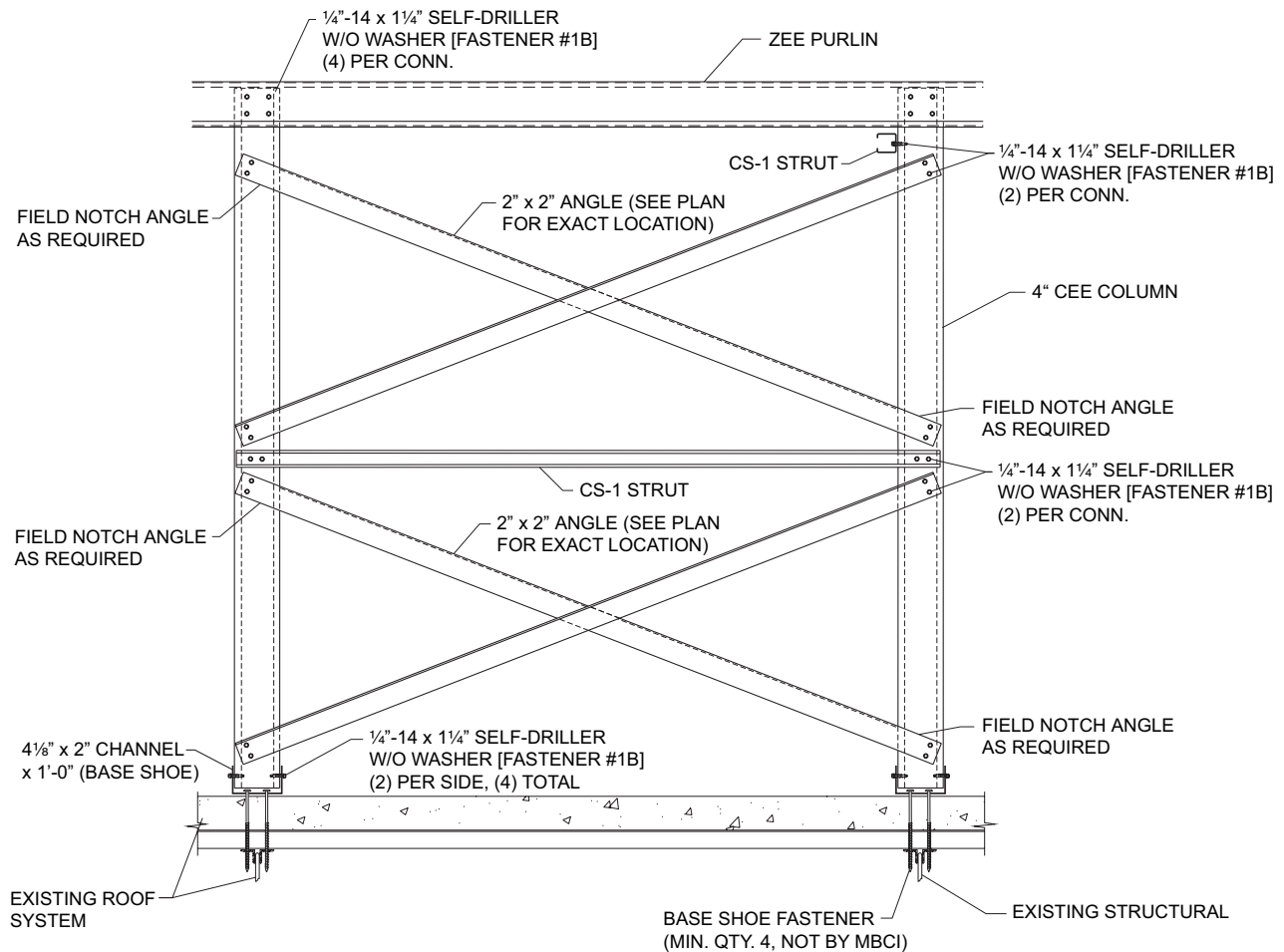
TRANSVERSE ANGLE BRACING (Perpendicular to Purlins)



DETAILS

NuRoof®

DOUBLE LONGITUDINAL ANGLE BRACING (Parallel to Purlins With Base Shoe)



Houston, TX 877/713-6224
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Lubbock, TX 800/758-6224
Memphis, TN 800/206-6224
Oklahoma City, OK 800/597-6224
Omaha, NE 800/458-6224
Phoenix, AZ 888/533-6224
Richmond, VA 800/729-6224

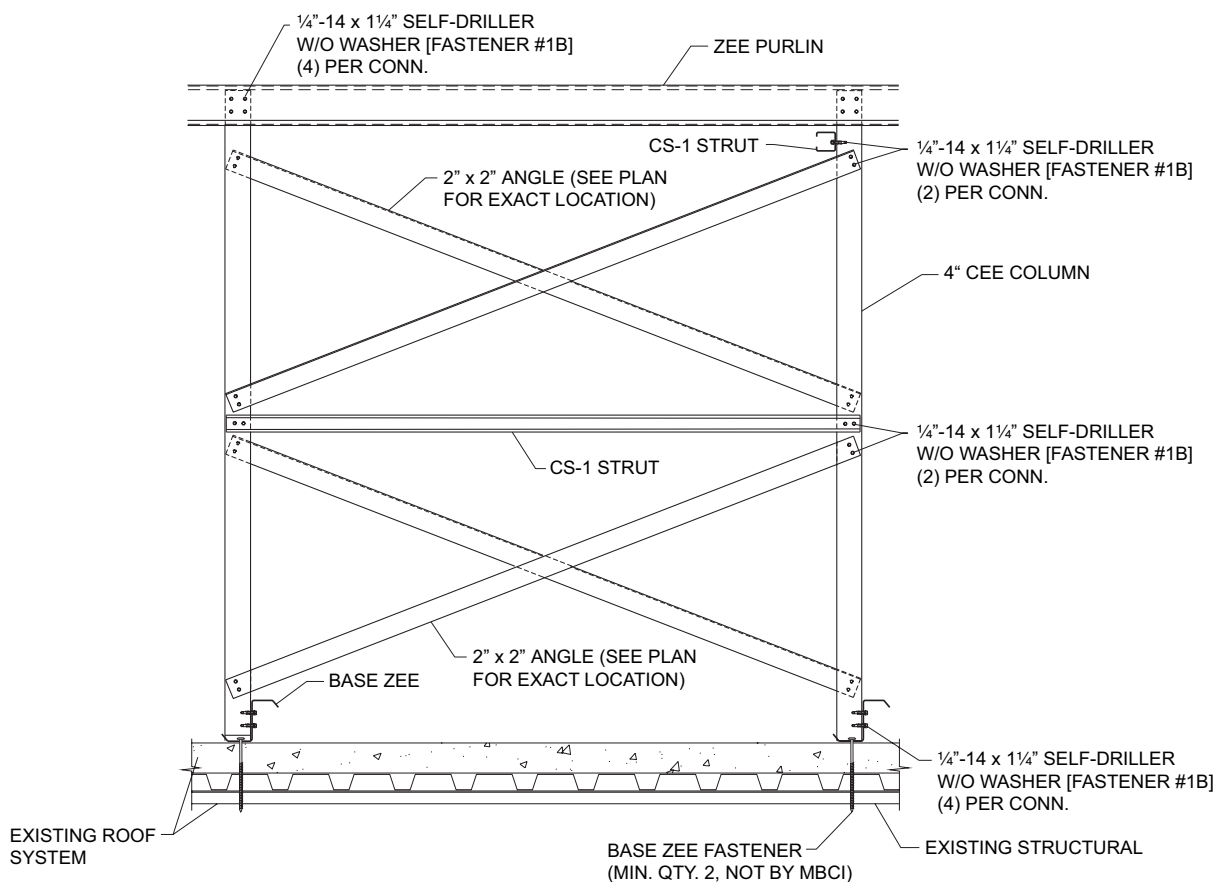
Rome, NY 800/559-6224
Salt Lake City, UT 800/874-2404
San Antonio, TX 800/598-6224
Tampa, FL Sales Office 800/359-6224



NuRoof®

DETAILS

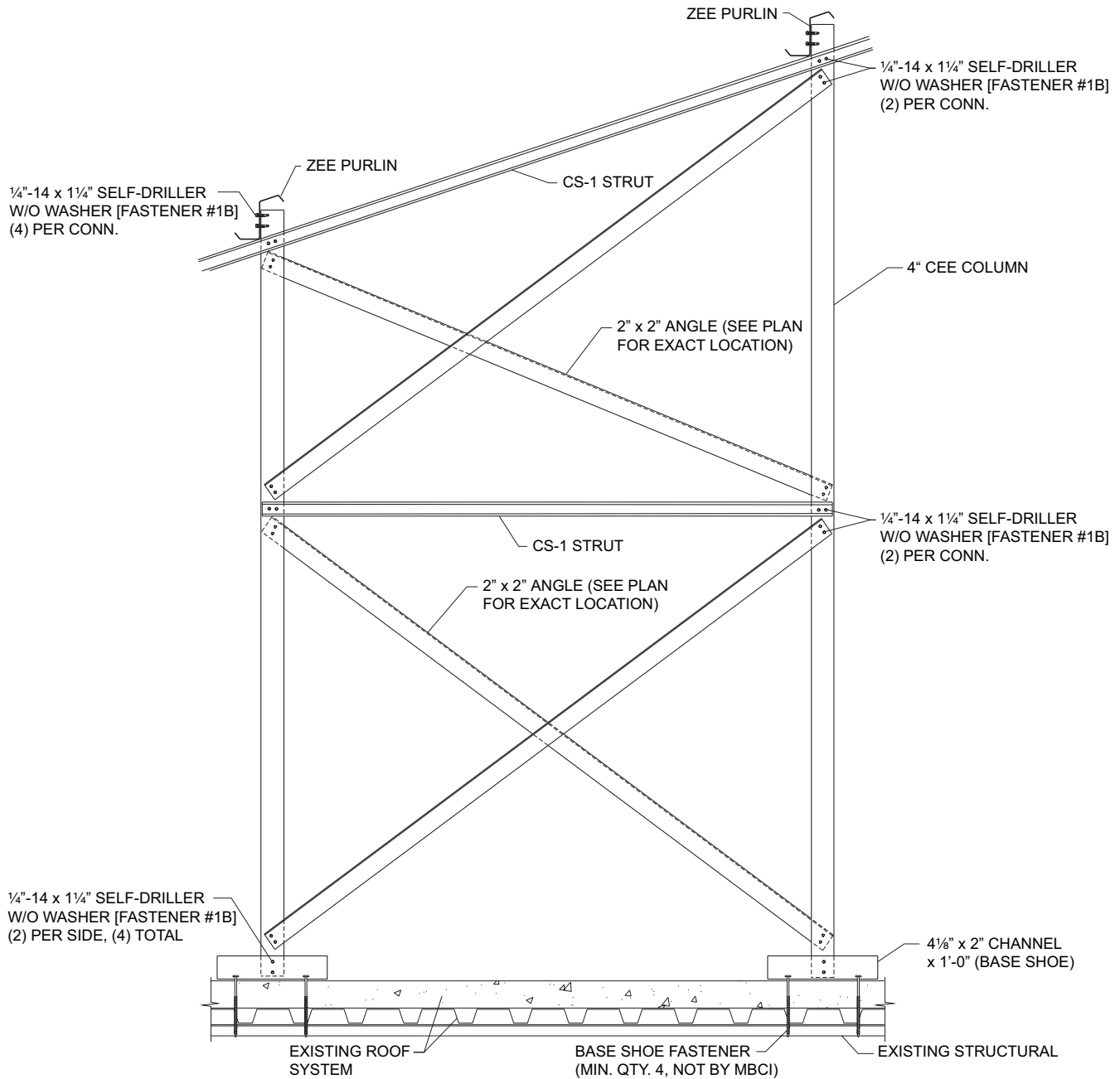
DOUBLE LONGITUDINAL ANGLE BRACING (Parallel to Purlins With Base Zee)



DETAILS

NuRoof®

DOUBLE TRANSVERSE ANGLE BRACING (Perpendicular to Purlins With Base Shoe)



Houston, TX 877/713-6224
 Adel, GA 888/446-6224
 Atlanta, GA 877/512-6224
 Atwater, CA 800/829-9324
 Dallas, TX 800/653-6224
 Indianapolis, IN 800/735-6224

Lubbock, TX 800/758-6224
 Memphis, TN 800/206-6224
 Oklahoma City, OK 800/597-6224
 Omaha, NE 800/458-6224
 Phoenix, AZ 888/533-6224
 Richmond, VA 800/729-6224

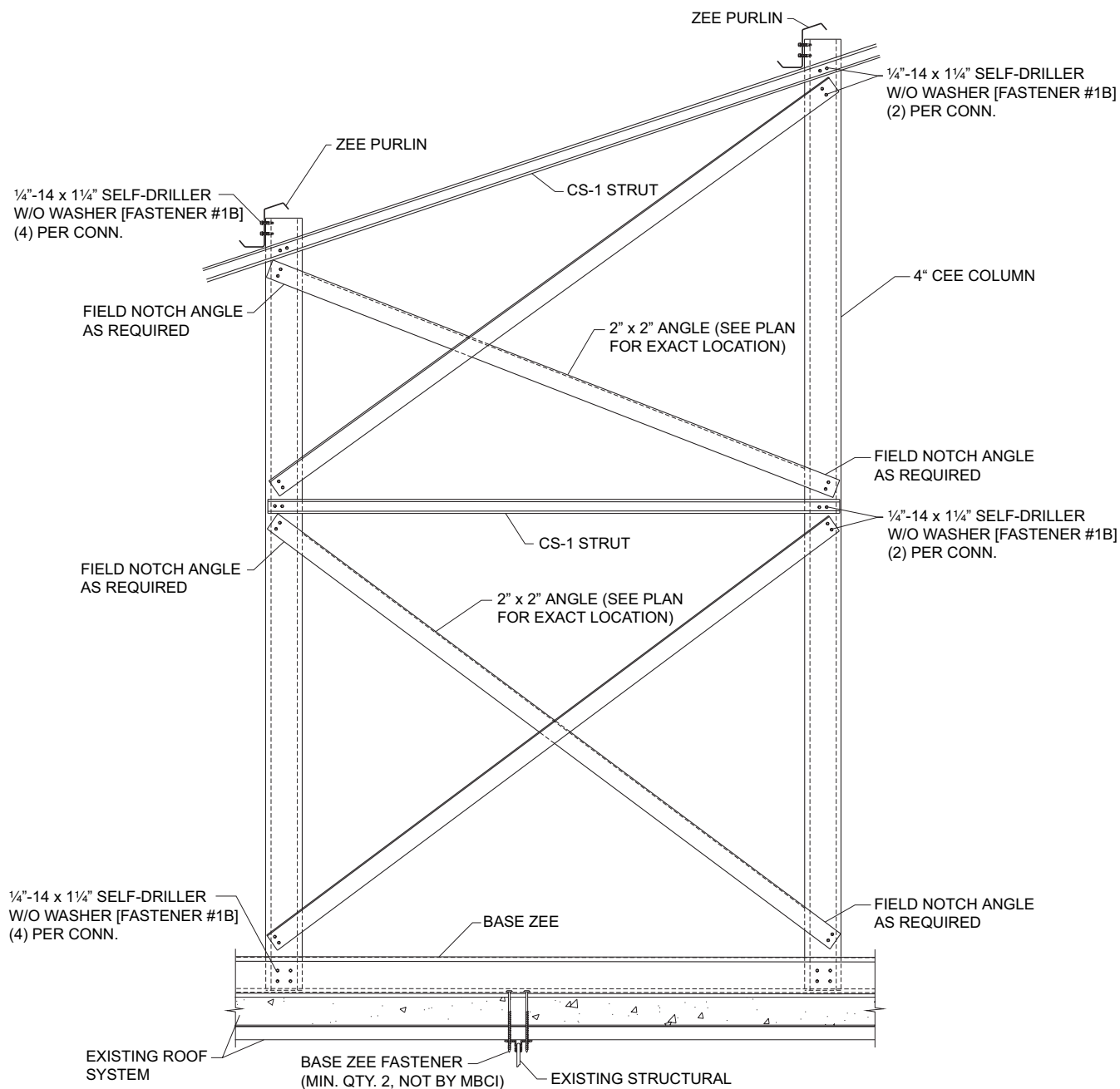
Rome, NY 800/559-6224
 Salt Lake City, UT 800/874-2404
 San Antonio, TX 800/598-6224
 Tampa, FL Sales Office 800/359-6224



NuRoof®

DETAILS

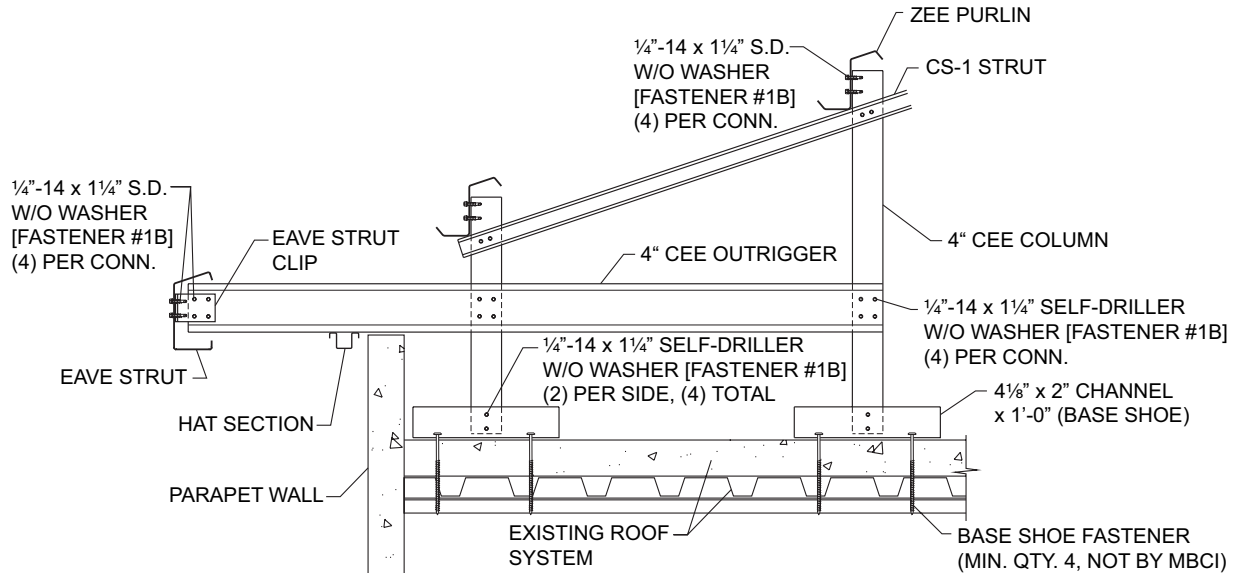
DOUBLE TRANSVERSE ANGLE BRACING (Perpendicular to Purlins With Base Zee)



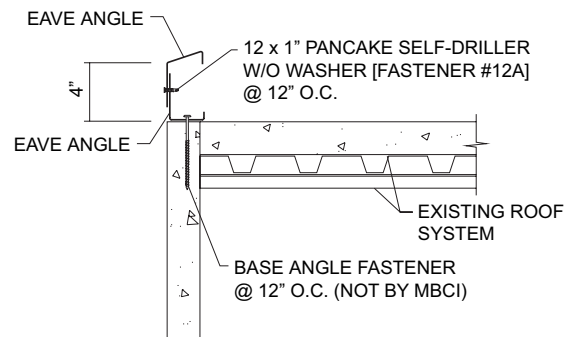
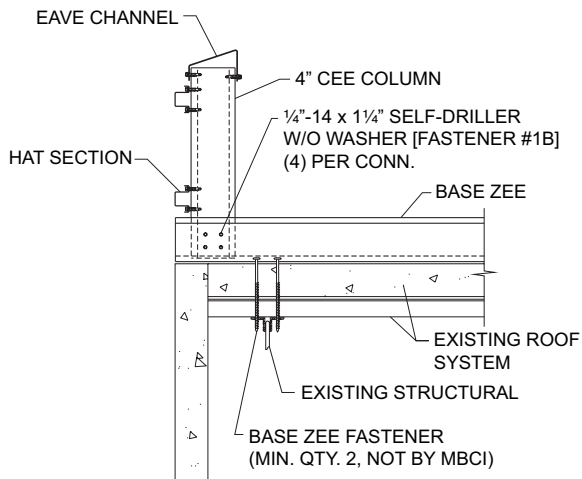
DETAILS

NuRoof®

EAVE OVERHANG (With Parapet Wall)



EAVE DETAILS



EAVE WITH FASCIA WALL

EAVE WITH ANGLES

Houston, TX 877/713-6224
 Adel, GA 888/446-6224
 Atlanta, GA 877/512-6224
 Atwater, CA 800/829-9324
 Dallas, TX 800/653-6224
 Indianapolis, IN 800/735-6224

Lubbock, TX 800/758-6224
 Memphis, TN 800/206-6224
 Oklahoma City, OK 800/597-6224
 Omaha, NE 800/458-6224
 Phoenix, AZ 888/533-6224
 Richmond, VA 800/729-6224

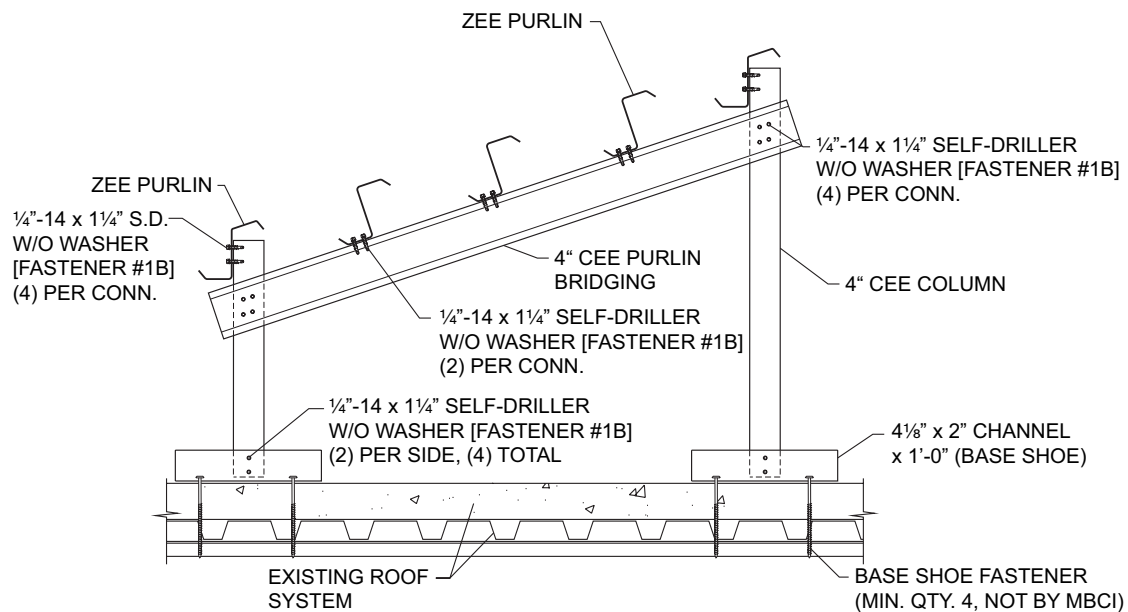
Rome, NY 800/559-6224
 Salt Lake City, UT 800/874-2404
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NuRoof®

DETAILS

EDGE/CORNER ZONE (For Use in High Wind Condition)



DESIGN INFORMATION

NuRoof[®]

ARCHITECT/ENGINEER INFORMATION (Optional Method)

1. The optional NuRoof[®] Retrofit Systems are designed to go directly over existing sloped roof systems.
2. The optional NuRoof[®] Grid System allows for additional purlins to be installed when the existing purlin spacing does not meet the current code requirements.
3. The optional NuRoof[®] Retrofit System over existing PBR requires the use of the MBCI Ultra-Dek[®] or Double-Lok[®] roof systems. The high clips used with these systems elevate the roof system 1 $\frac{3}{8}$ " over the existing structure, allowing the panels to pass over a standard 1 $\frac{1}{4}$ " PBR panel. If the existing roof system has a rib height of 1 $\frac{1}{2}$ " a non-compressible $\frac{1}{4}$ " shim can be used.
4. Care must be taken when cutting back the eave of the existing roof system to make sure no shavings land on adjacent or stored new roofing materials. Hot shavings landing on new material can cause premature rusting of the material surface.
5. When installing the optional NuRoof[®] Retrofit System over a PBR system the module of the existing roof system must be checked. The MBCI Ultra-Dek[®]/Double-Lok[®] roof systems hold a 24" module and if the existing roof was stretched ahead or shrunk back the clips will eventually foul into an existing major rib. An 18" panel can be installed in lieu of a 24" panel to allow the new roof system to stay on the module created by the existing roof panels.

INSTALLATION GUIDELINES

1. Pre-Order
 - a. Prior to ordering panels, all dimensions should be confirmed by field measurements.
2. Jobsite Storage and Handling
 - a. Check the shipment against the shipping list.
 - b. Damaged material must be noted on Bill of Lading.
 - c. Materials should be handled carefully. A spreader bar of appropriate length is recommended for hoisting.
3. Application Checklist
 - a. Check substrate for proper alignment and uniformity.
 - b. Periodic check of panel alignment is crucial to proper panel installation.
 - c. Material should be cut on the ground to minimize cut fillings on new materials.

Houston, TX 877/713-6224
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 Dallas, TX 800/653-6224
 Indianapolis, IN 800/735-6224

Lubbock, TX 800/758-6224
 Memphis, TN 800/206-6224
 Oklahoma City, OK 800/597-6224
 Omaha, NE 800/458-6224
 Phoenix, AZ 888/533-6224
 Richmond, VA 800/729-6224

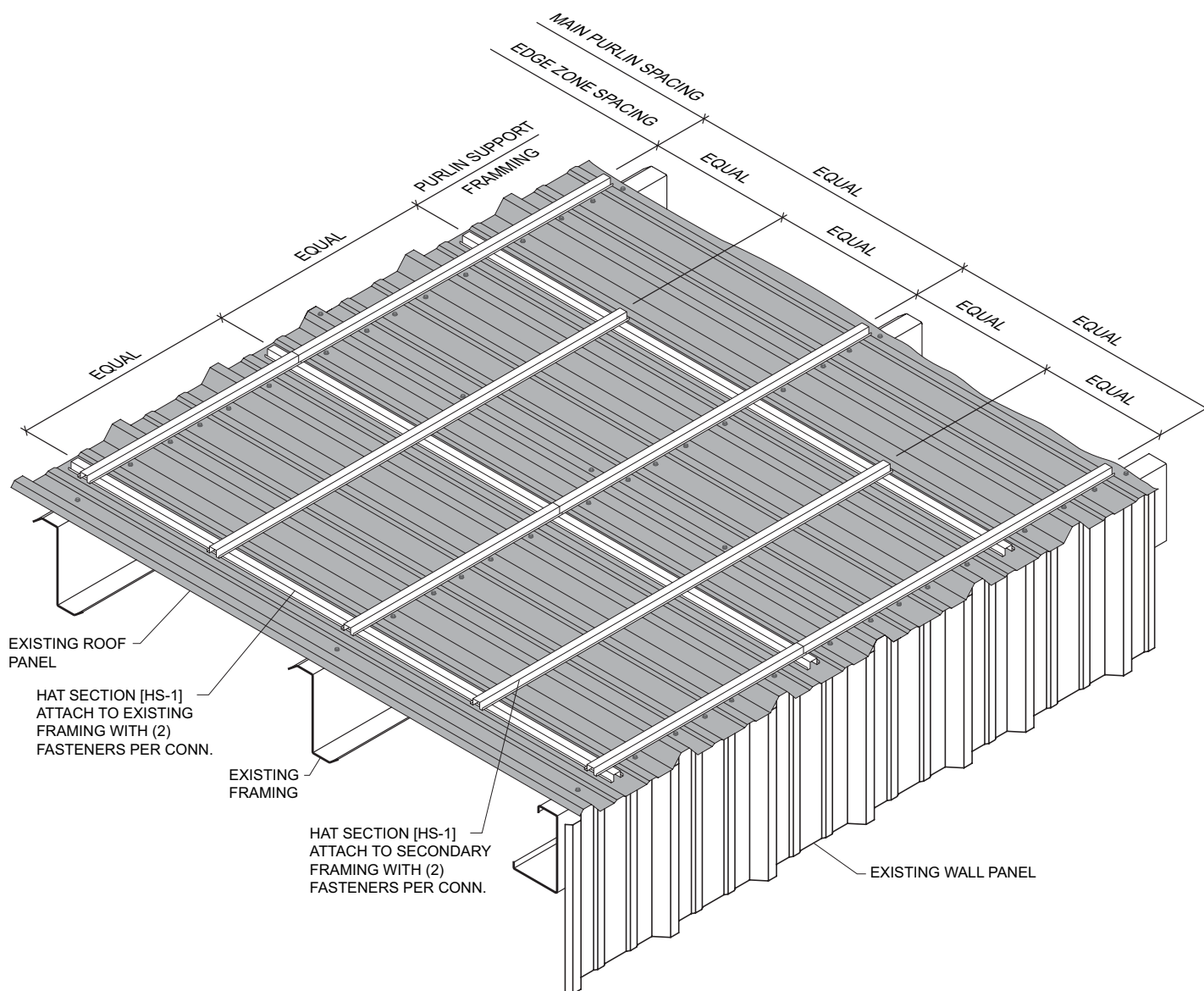
Rome, NY 800/559-6224
 Salt Lake City, UT 800/874-2404
 San Antonio, TX 800/598-6224
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NuRoof®

DETAILS

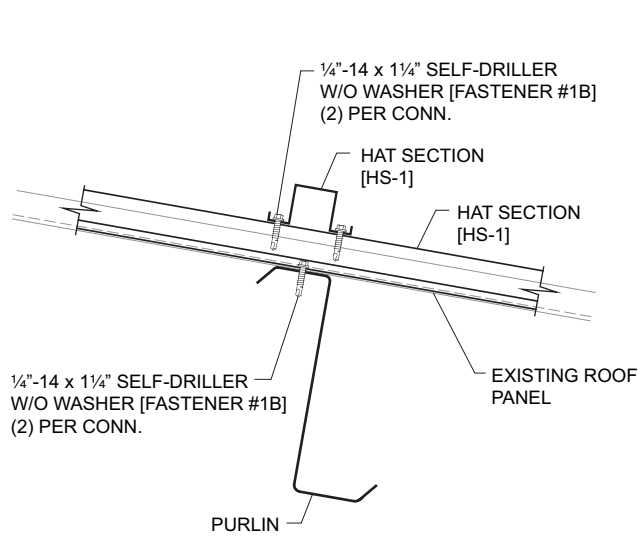
NuRoof® GRID SYSTEM (Optional Method)



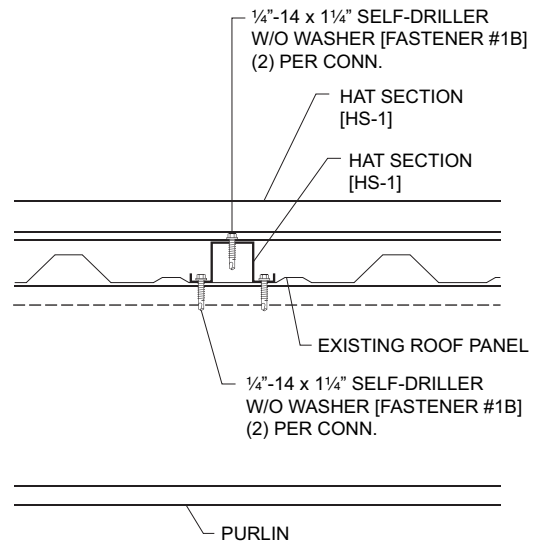
DETAILS

NuRoof®

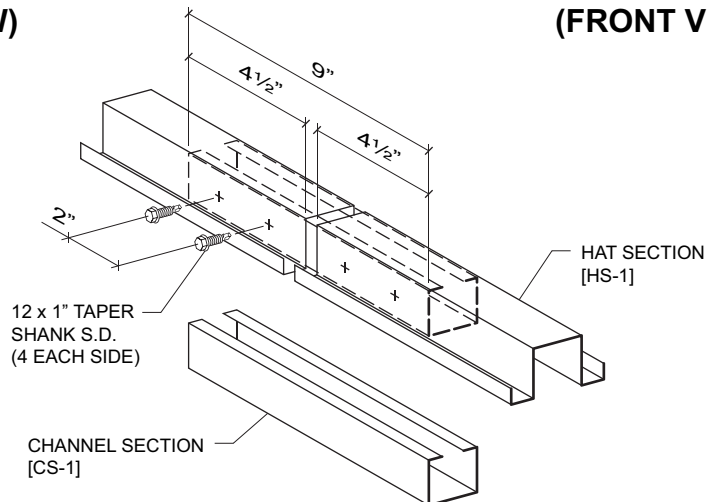
NuRoof® GRID SYSTEM (Optional Method Details)



**CONNECTION OF HAT SECTIONS
TO PURLIN
(SIDE VIEW)**



**CONNECTION OF HAT SECTIONS
TO PURLIN
(FRONT VIEW)**



SPLICE DETAIL

NOTE: MUST OCCUR OVER A SUPPORT MEMBER.

Houston, TX 877/713-6224
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 Atwater, CA 800/829-9324
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 Indianapolis, IN 800/735-6224

Lubbock, TX 800/758-6224
 Memphis, TN 800/206-6224
 Oklahoma City, OK 800/597-6224
 Omaha, NE 800/458-6224
 Phoenix, AZ 888/533-6224
 Richmond, VA 800/729-6224

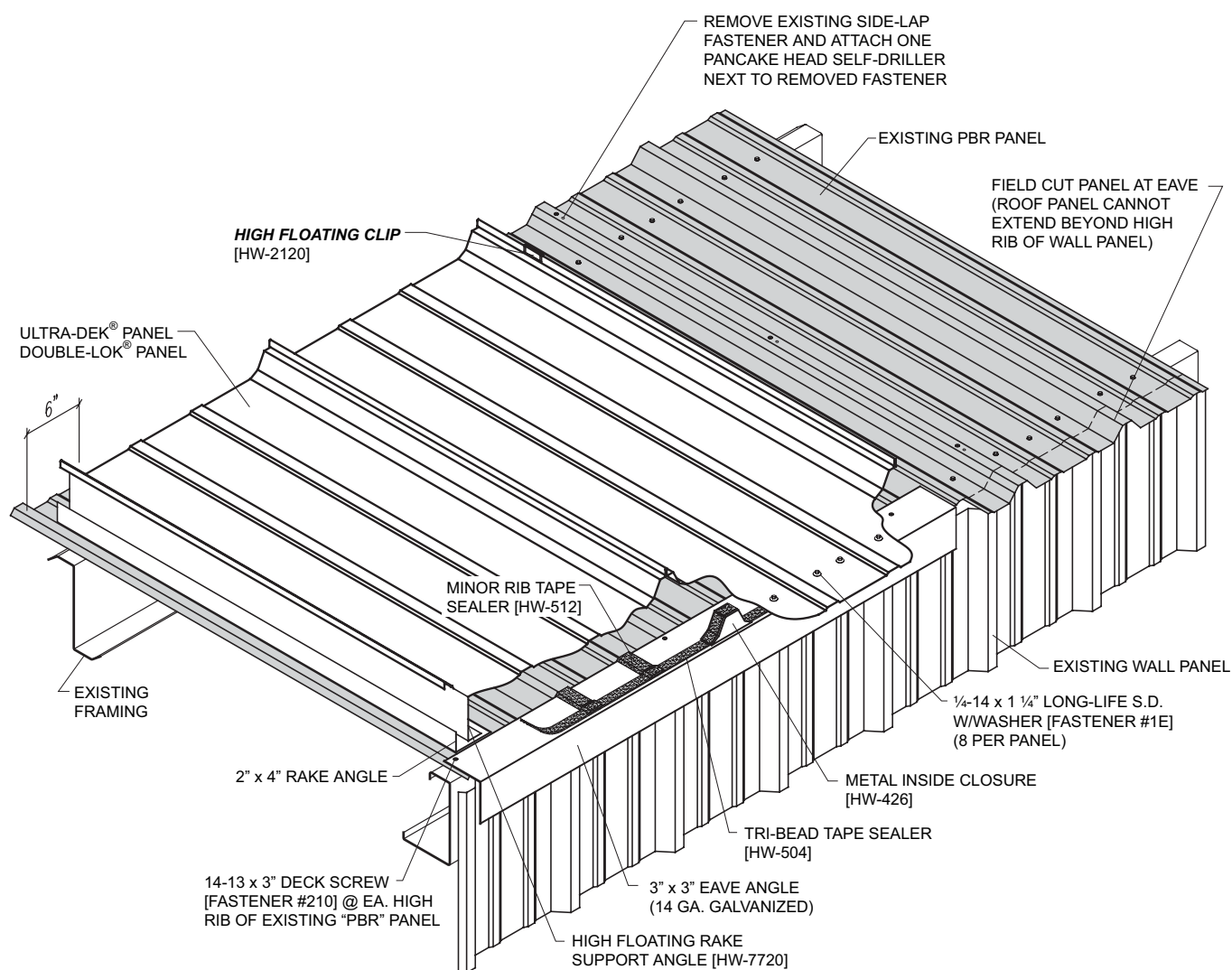
Rome, NY 800/559-6224
 Salt Lake City, UT 800/874-2404
 San Antonio, TX 800/598-6224
 Tampa, FL Sales Office 800/359-6224



NuRoof®

DETAILS

SSR SYSTEM OVER EXISTING PBR PANEL (Optional Method)

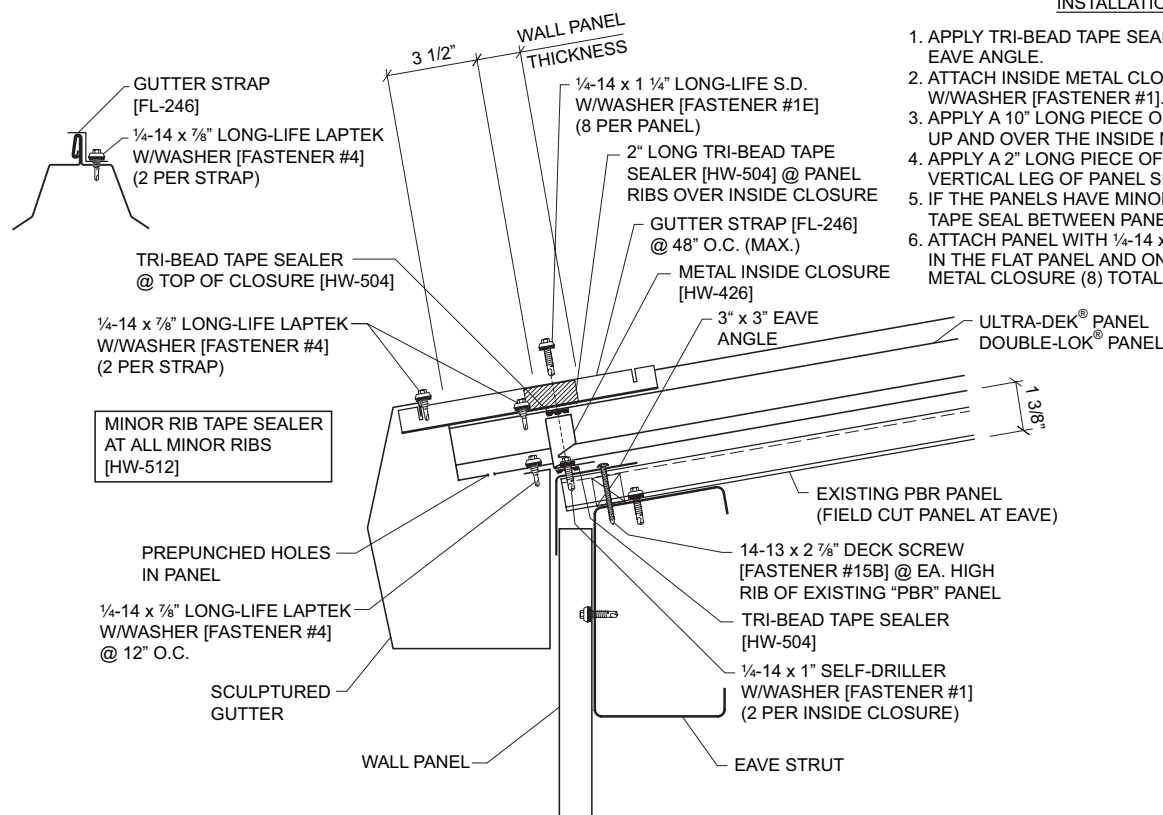


NOTE: MAJOR RIB OF EXISTING ROOF PANEL CANNOT EXCEED 1¼" IN HEIGHT.

DETAILS

NuRoof®

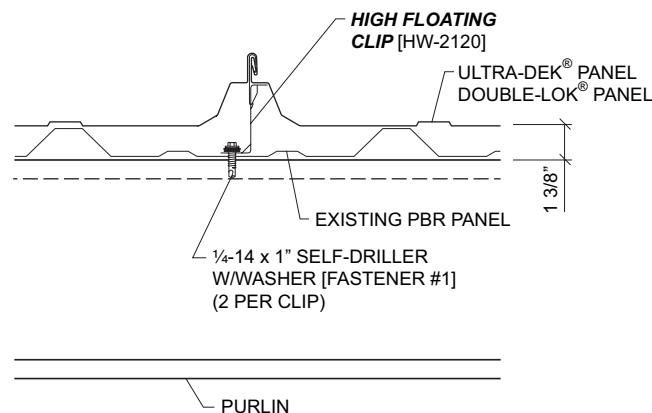
SSR SYSTEM OVER EXISTING PBR PANEL (Eave Detail)



INSTALLATION NOTE:

1. APPLY TRI-BEAD TAPE SEALER CONTINUOUS ALONG EAVE ANGLE.
2. ATTACH INSIDE METAL CLOSURE WITH 1/4-14 x 1" S.D.S. W/WASHER [FASTENER #1].
3. APPLY A 10" LONG PIECE OF TRI-BEAD TAPE SEALER UP AND OVER THE INSIDE METAL CLOSURE.
4. APPLY A 2" LONG PIECE OF TRI-BEAD TAPE SEALER IN VERTICAL LEG OF PANEL SEAM.
5. IF THE PANELS HAVE MINOR RIBS, APPLY MINOR RIB TAPE SEAL BETWEEN PANEL AND EAVE TRIM OR GUTTER.
6. ATTACH PANEL WITH 1/4-14 x 1 1/4" LONG-LIFE W/WASHER IN THE FLAT PANEL AND ONE EACH SIDE OF THE INSIDE METAL CLOSURE (8) TOTAL [FASTENER #1E].

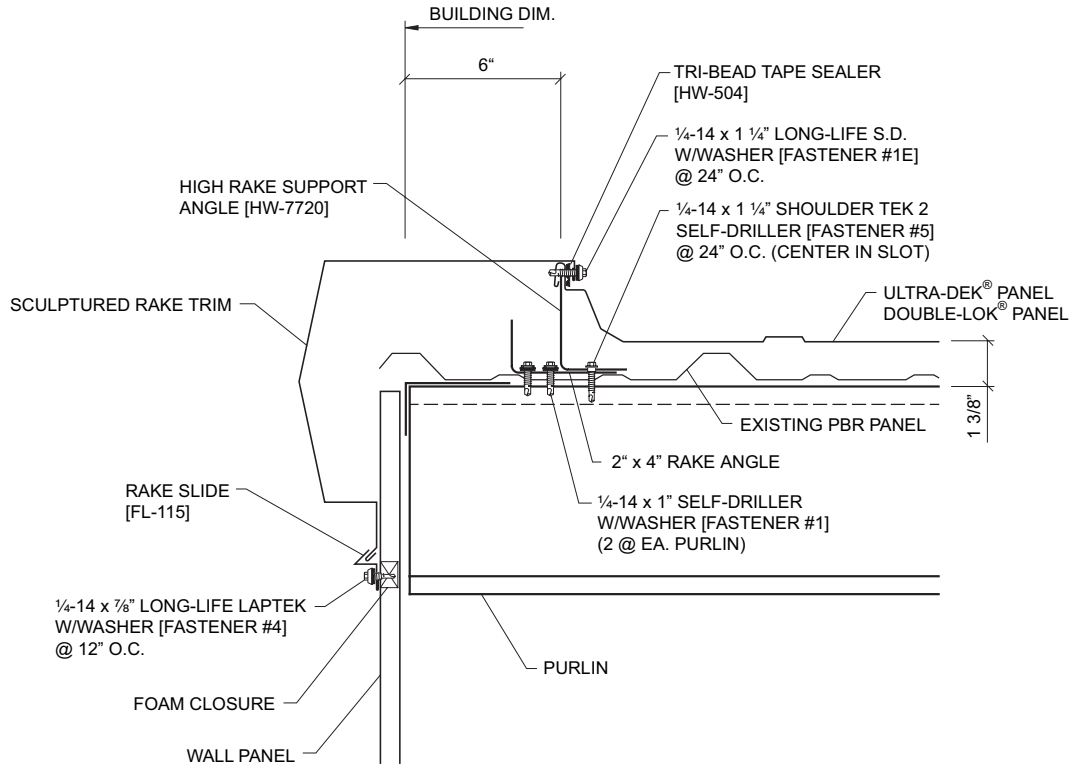
SSR SYSTEM OVER EXISTING PBR PANEL (Clip Attachment Detail)



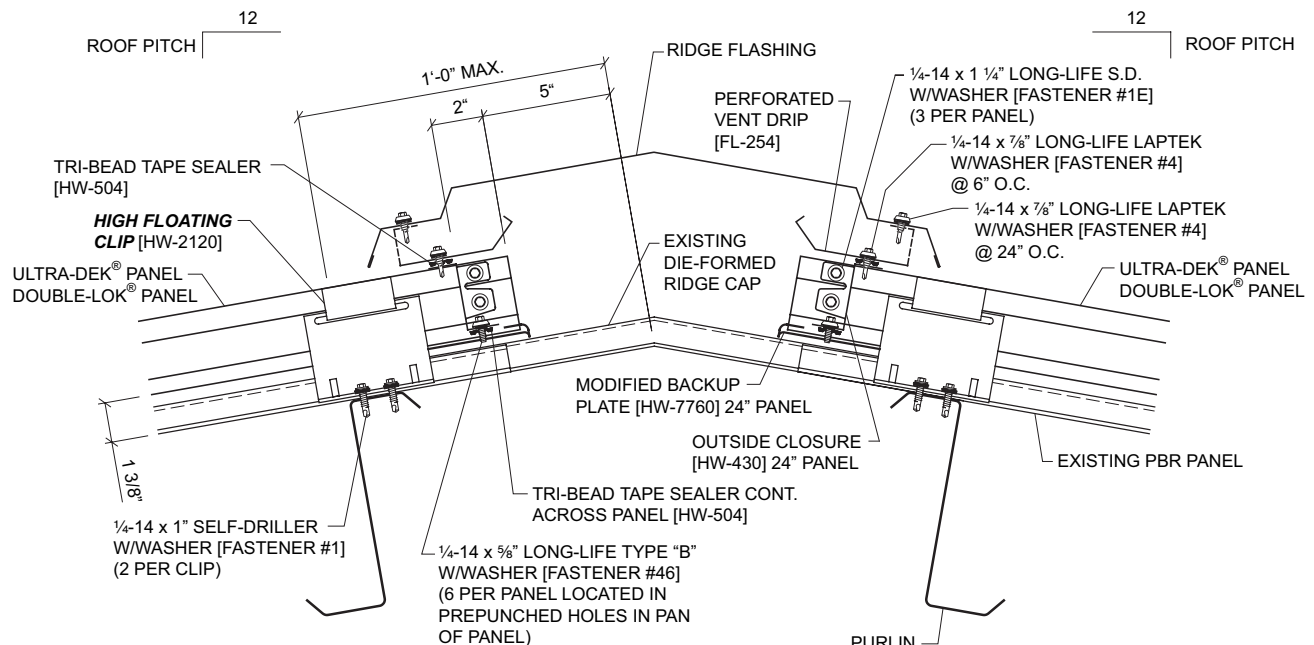
NuRoof[®]

DETAILS

SSR SYSTEM OVER EXISTING PBR PANEL (Rake Detail)



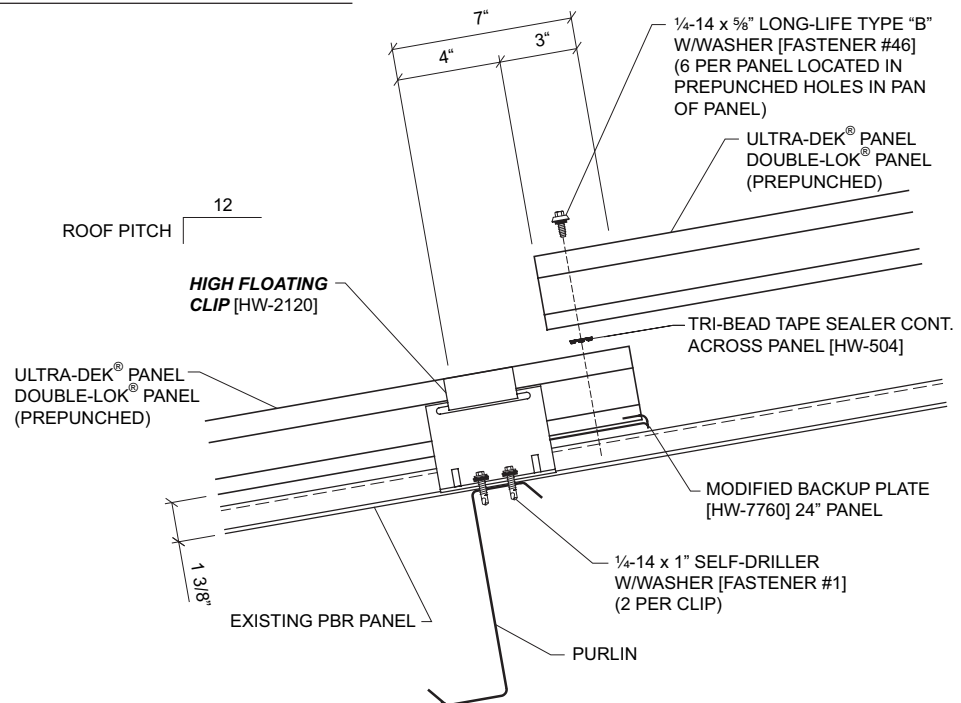
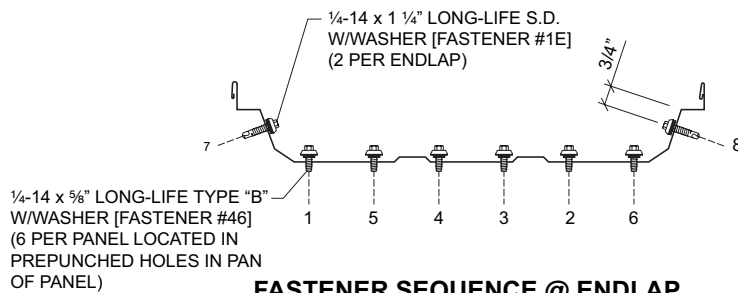
SSR SYSTEM OVER EXISTING PBR PANEL (Vented Ridge Detail)



DETAILS

NuRoof®

SSR SYSTEM OVER EXISTING PBR PANEL (EndLap Detail)



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Lubbock, TX 800/758-6224
Memphis, TN 800/206-6224
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Omaha, NE 800/458-6224
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NOTES



Metal Roof and Wall Systems

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Oklahoma City, OK 800/597-6224
Omaha, NE 800/458-6224
Phoenix, AZ 888/533-6224
Richmond, VA 800/729-6224

Rome, NY 800/559-6224
Salt Lake City, UT 800/874-2404
San Antonio, TX 800/598-6224
Tampa, FL Sales Office 800/359-6224

NOTES

Houston, TX 877/713-6224
Adel, GA 888/446-6224
Atlanta, GA 877/512-6224
Atwater, CA 800/829-9324
Dallas, TX 800/653-6224
Indianapolis, IN 800/735-6224

Lubbock, TX 800/758-6224
Memphis, TN 800/206-6224
Oklahoma City, OK 800/597-6224
Omaha, NE 800/458-6224
Phoenix, AZ 888/533-6224
Richmond, VA 800/729-6224

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Salt Lake City, UT 800/874-2404
San Antonio, TX 800/598-6224
Tampa, FL Sales Office 800/359-6224



NOTES



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14031 West Hardy
P.O. Box 38217
Houston, TX 77238
877/713-6224

Indianapolis, IN

1780 McCall Drive
P.O. Box 657
Shelbyville, IN 46176
800/735-6224

Adel, GA

1601 Rogers Road
P.O. Box 653
Adel, GA 31620
888/446-6224

Lubbock, TX

5711 East FM-40
P.O. Box 10133
Lubbock, TX 79408
800/758-6224

Atlanta, GA

2280 Monier Avenue
P.O. Box 44729
Atlanta, GA 30336
877/512-6224

Memphis, TN

300 Highway 51 North
P.O. Box 366
Hernando, MS 38632
800/206-6224

Atwater, CA

550 Industry Way
P.O. Box 793
Atwater, CA 95301
800/829-9324

Oklahoma City, OK

7000 S. Eastern Avenue
P.O. Box 95998
Oklahoma City, OK 73143
800/597-6224

Dallas, TX

1804 Jack Mc Kay Blvd.
P.O. Box 1210
Ennis, TX 75199
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Omaha, NE

1011 Ellison Avenue
P.O. Box 19085
Omaha, NE 68119
800/458-6224

Phoenix, AZ

660 South 91st Avenue
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Colonial Heights, VA 23834
800/729-6224

Rome, NY

6168 State Route 233
P.O. Box 4141
Rome, NY 13442
800/559-6224

Salt Lake City, UT

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Salt Lake City, UT 84116
800/874-2404

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