Project Name: E & M Concrete
Project Address: 308 Jarco Drive, Fuquay-Varina, NC 27526
Chief Order No.: B3025326
Date: 8/28/25
Rev.: 0

RESULT OF INSPECTION:

____ PASS

____ FAIL

_X_ PASS AS NOTED

To Whom it May Concern,

Built, LLC, a North Carolina Company, performed a visual onsite inspection on the newly built pre-engineered metal building located at 308 Jarco Drive, Fuquay-Varina, NC 27526 on the structural members and bolted connections at this location. This inspection reviewed the (6) frame lines, the girts on the endwalls of the building, the girts on the sidewall of the building, the purlins creating the roof framing, the tension wind bracing in the walls and ceiling, the anchor bolts, and the door/window framing shown in the plans (DETAILS).

During this inspection, the inspectors verified all structural parts of the (6) frame lines were installed in the correct locations per their part numbers and all specified bolts were of the correct diameter, length, and grade as well as in the correct locations. All anchor bolts were inspected in order to verify that the correct hardware was used in the correct configuration and that all anchor bolts were tightened to the baseplate to the specified torque. The anchor bolt projection was slightly less than required on column EC-7 on Frame Line 6. 3 of the 4 anchor bolts for this column do not have full engagement of the nut. A puddle weld was used for the (3) anchor bolts to reinforce the connection of the top of the bolt to the nut. As built condition was approved by a NC licensed engineer and approval letter “Appendix B” attached to this report. All bolts, including the structural connection bolts to the roof joists as well as the lower strength girt connection bolts, were verified by the inspector to be in snug tight condition at minimum. While inspecting the frame lines all wall girt lines were inspected around the building to ensure correct installation location per the part numbers and bolts of the correct diameter, length and grade were installed at the correct location. Finally, all the small bracing members and wind bracing were inspected for location and proper installation technique based on type and purpose.

Photo documentation was also taken of all bolts that could be accessed via camera and these photos can be found in “Appendix C” of this report.

It is the opinion of this inspection that the structural steel package for this building was correctly installed per the manufacturers and designers’ specification and will perform as designed. Having taken no part in the design of this building the inspector and Built, LLC is not liable for the performance of this building. Furthermore, Built, LLC and any inspection stamping engineer are not liable for this building beyond the date of inspection as additional work will be completed on the structure, with this being the case it is possible that changes will occur to the previously reviewed portion of the structure. No additional decisions will be made based on this inspection without the prior approval of the inspector and Built, LLC beyond the intended purpose of a third-party Building Permit Bolt Inspection.

Thanks,

Paul M White, Jr

Paul M. White Jr. PE, CWI

NORTH CAROLINA PROFESSIONAL SEAL 040973 ENGINEER PAUL MCINTYRE WHITE, JR.

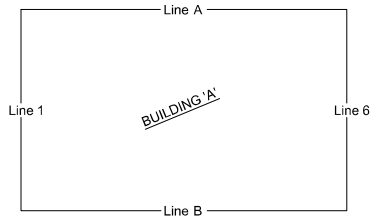
Project Name: E & M Concrete
Project Address: 308 Jarco Drive, Fuquay-Varina, NC 27526
Chief Order No.: B3025326
Date: 8/28/25
Rev.: 0

APPENDIX A

For Construction Drawings

BLDG. "A" Width	Length	Line B Height	Line A Height	Line B Roof Pitch	Line A Roof Pitch	Downspout Drops Line B	Downspout Drops Line A
80'-2"	140'-2"	20'-0"	20'-0"	2.0:12	2.0:12	4	4

TABLE OF CONTENTS



KEY PLAN

Roof Panel:

Type: MSC
Gage: 24
Color: Galvalume (GM)

Wall Panel:

Type: AP
Gage: 24
Color: Galvalume (GM)

Framing:

Purlin Type: ZEE
Girt Type: ZEE CEE

Ordered Options:

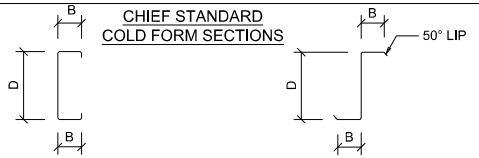
Base Condition:	Base Cee- Base Trim /Drip Edge
Base Trim Color:	Galvalume (GM)
Wall Mastic:	No
UL Rating:	Yes, UL90
Sidewall Eave Trim Type:	Standard Profile Gutter
Eave Trim Color:	Antique Bronze (AQ)
Gable Trim Color:	Antique Bronze (AQ)
Downspout Type:	Corrugated
Downspout Color:	Antique Bronze (AQ)
Elbows at Bottom of Drops:	Yes
Corner Trim Color:	Galvalume (GM)
Framed Opening Trim Color:	Antique Bronze (AQ)
Light Transmitting Panels:	Roof = None
	Wall = None

Accessories

Wall Openings
See drawings for additional info.

QUAN	DESCRIPTION
1	10'-0" W x 10'-0" H High Lift Overhead Door
2	14'-0" W x 14'-0" H High Lift Overhead Door
1	1'-0" W x 0'-10" H Louver
1	6'-0" W x 6'-0" H Louver
1	10'-0" W x 9'-0" H Other - Door
1	12'-8 1/2" W x 8'-8" H Other - Door
1	17'-0 1/2" W x 8'-8" H Other - Door
1	3'-4" W x 7'-2" H Walkdoor
4	3'-4" W x 7'-4" H Walkdoor
9	10'-0" W x 5'-8" H Window

CHIEF STANDARD COLD FORM SECTIONS

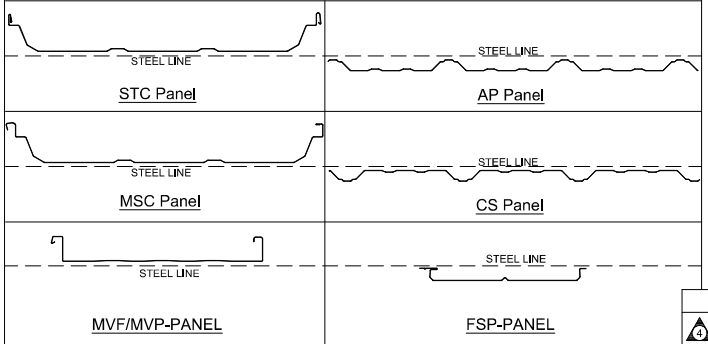


DESIGNATION	D	B
816	8.00	3.00
814	8.00	3.00
812	8.00	3.00
1014	10.00	3.50
1012	10.00	3.50

DESIGNATION	D	B
816	8.00	2.50
814	8.00	2.50
812	8.00	2.50
1014	10.00	2.75
1012	10.00	2.75

STANDING SEAM ROOF PANEL ERECTION MANUAL: MSC V7

CHIEF STANDARD PROFILES



TO BE USED FOR CONSTRUCTION

IAS ACCREDITED AC472

Chief Buildings, a Division of Chief Industries, Inc., is certified as an Approved Fabricator recognized under section 1704.2.5.1 of the 2015, 2018, and 2021 IBC, section 1704.2.5.2 of the 2012 IBC and section 1704.2.2 of earlier code editions in accordance with the International Accreditation Service, Inc., Accreditation Criteria for Inspection Programs, AC472 (Certificates of Accreditation: MB-123 & MB-124).

REVISIONS

4
3
2
1

Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

Chief Buildings
P.O. Box 2078, Grand Island, NE 68802-2078
(308) 389-7289 cs@chiefind.com

NORTH CAROLINA 044297 PROFESSIONAL ENGINEER MICHELLE L. HOFF

03/11/2025

Drawing	COVER PAGE
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
BD	ALI	B3025326	C1 / C1
2/10/25	3/6/25		

Quality Assurance Policy

The following Quality Assurance Policy is comprised of a list of guidelines and procedures to expedite customer service requirements in the field. Chief's objective is to produce a first-class product and back it up with the best customer service in the industry.

The Quality Assurance Policy has been developed over the last fifty years and is based on handling customer service in the field. These guidelines will simplify the communication process and expedite any special requirements needed to make your project run as smooth as possible.

Common Industry Practices:

The correction of minor misfits by the use of drift pins to draw the components into line, shimming, moderate amounts of reaming, chipping and cutting, and the replacement of minor shortages of material are a normal part of erection and are not subject to claim.

Chief will not pay claims unless the following claim and authorization procedure is strictly followed by the Builder, or if the correction work is started prior to receipt by Builder of Chief's written "Authorization of Corrective Work". If erection is not by the Builder, the Erector is responsible for providing the Builder with the information necessary to make the claim to Chief as provided below.

Chief is not responsible for any claim resulting from the use of any drawings or literature not specifically released for the components purchased for the project.

Chief is not responsible for any claim resulting from the use by the Erector of any improper material or material containing defects that can be detected by visual inspection. Claims for disassembling such improper or defective material and costs of erecting replacement material are not allowed.

Before you contact Chief:

Please have the following information ready before you call, or provided in an e-mail.

1. Chief's order number for your project. This information is available from the drawings or the Shipping Papers.
2. Page numbers and detail callouts from the drawings.
3. Part marks.
4. Line numbers.
5. Contact Information (Name, Company, return Phone Number and e-mail address):

Questions?
Our Customer Service team is here to help!
Contact us at 308-389-7289
You can also contact us via e-mail at
cs@chiefind.com
or use the QR code to start an e-mail.

Tim Dykes
Brett Nellson
Lyle Miller
Rusti Register
Terence Flowers

Shortage and Damage Claims

Chief personnel checks off all components on the order prior to shipment. However, it is imperative that the Builder checks each shipment against the Shipment Delivery Note to ensure that the shipment is complete and no damage has occurred. A Shipment Delivery Note and Bill of Lading will be provided with each load.

A full set of Shipping Papers, Erection Drawings, Chief Buildings standing seam erection manuals, Safety Data Sheets (SDSs) and other important documents that will aid you in erecting your project are located in a Resale Box that says "DOCUMENTS ENCLOSED".

Checking the Shipment Delivery Note:

The Shipment Delivery Note will contain the contents of each load delivered to the jobsite. Each individual item or bundle should be checked against the Shipment Delivery Note. Each bundle will have a packing list or bundle tag that lists the mark numbers, quantities and weight of the bundle. The packing list should remain with each bundle to identify individual pieces.

- Columns, rafters, posts, beams and other structural members are individually marked.
- Angle flange braces are individually marked and bundled with a packing list. The part description on the Shipping Papers contains the size and length of the angle along with the bolt-up standard for that piece mark.
- Sag angles are individually marked and bundled with a packing list. If there is a bundle of the all the same mark number, only the top angles are marked and common piece marks are color coded on one end. The part description on the Shipping Papers contains the angle size and length in inches.
- Rod bracing are individually marked (CB) and bundled with a packing list. The part description on the Shipping Papers contains the cable or rod diameter and length in inches.
- Girts and purlins are individually marked and bundled with a packing list. The part description on the Shipping Papers contains the member size and length in inches.
- Panel is only identified with a packing list. The piece mark on the packing list includes the length of the panels in inches. The part description on the Shipping Papers contains the color and panel type - "CS" or "AP".
- Bolting clips are individually marked and packaged in boxes with a packing list. Standard bolting clips can also be identified with dimensioned drawings found in the Standard Parts pages of the Chief Buildings Erection Drawings. Special plates will have a part drawing included with the erection drawings.
- Trims are individually marked and packaged in boxes with a packing list. Standard Trims can also be identified with dimensioned drawings found in the Standard Parts pages of the Chief Buildings Erection Drawings. Special Trims will have a part drawing included with the erection drawings. The part description on the Shipping Papers contains the length and colors of trim pieces.
- Bolts, nuts, screws, mastics and other miscellaneous items are packaged in resale boxes. A packing list is attached to each box that describes the contents.

Shortage and Damage Claims (Continued)

Missing or Damaged Parts:

Any missing or damaged items are to be noted on the carrier's Bill of Lading. Chief is to be notified immediately.

Concealed shortages must be reported to Chief during the following period dating from receipt of the first load:

One load job = 2 weeks	Four load job = 5 weeks	Seven or more load job = 8 weeks
Two load job = 3 weeks	Five load job = 6 weeks	
Three load job = 4 weeks	Six load job = 7 weeks	

Chief's responsibility for shortages expires at the end of these notification periods.

Replacement Shipment:

Maximum effort will be made by Chief to ship replacement components as quickly as possible. Chief will attempt to ship standard components fabricated in its building plants within 48 hours and stock items will be ready to ship in 24 hours.

When a shortage is determined, the Builder needs to notify Chief's Customer Service Department of the issue. Chief's Order Number and complete information describing the parts required must be conveyed at this time.

Chief will act **immediately** to get the parts to the Builder and responsibility for the problem will be determined later.

After the problem has been corrected, Chief will determine where the responsibility lies. If it is Chief's error, Chief will provide the replacement material at no cost. Otherwise, Chief will invoice accordingly.

Transit Damage:

Nominal damage can occur during transit. Chief supplies touch-up paint for such cases. However, if excessive damage occurs, the following procedure will be observed:

Material damage (transit or otherwise) should be noted on the carrier's Bill Of Lading. Failure to note the damage on the Bill Of Lading will result in the Builder having to file the freight claim and Chief may charge the Builder for the replacement material.

White Rust:

All panels shipped from Chief's building plants are in good condition.

Chief bundles and/or boxes of components are only for protection during transit. This packaging is not intended for protection during storage.

Panels must be stored so air can circulate freely. Trapped moisture may cause discoloration or white rust. Refer to the "Unloading Procedures" in the General Information page of the Chief Buildings *Erection Drawings*.

Primer:

Chief's shop primer is a rust inhibiting gray modified acrylic primer. This primer is intended to protect the steel only for short periods of exposure to ordinary atmospheric conditions. In addition, shop primer does not provide the uniformity of appearance, or the durability of a field applied finish coat of paint over a shop primer.

The Builder must ensure that the primed material is stored in such a manner that water, snow, ice and other debris are not allowed to pond in the members. If primed material is to be top coated with other paint, compatibility tests must be performed by the Builder to ensure acceptable results. These compatibility tests should cover a cross-section of members (clips, angles, purlins, girts, columns, rafters, beams, flange braces, etc.) as different primers may be used on different members.

Ice and snow melt chemicals that DOTs use are extremely corrosive to the steel and should be cleaned off at the earliest convenience.

Panel Bundles:

Chief's standing seam panels will be sent at a maximum length of 52' unless otherwise directed. Any bundles over 30' in length MUST be unloaded with a spreader bar. Additional handling and storage recommendations are included in the erection manuals.

Authorization for Returning Merchandise

The authorization must be obtained from Chief's Customer Service Department before merchandise may be returned for credit. Returned merchandise shall be limited to resale type items (i.e. fasteners, closures, etc.) at Chief's sole discretion. Chief retains the prerogative to allow or disallow the return of merchandise.

Builder must contact Chief's Customer Service Department with a description of the merchandise and the reason for their request.

When authorization has been granted, an authorization form will be sent to the Builder along with a pre-numbered tag to attach to the merchandise being returned. A 15% re-stock charge may be assessed on all merchandise which is authorized to be returned.

Special Order Merchandise:

Special merchandise ordered, such as special doors, windows, vents, fasteners, etc., may not be returned for credit.

Replacement Items:

All merchandise shipped will be invoiced to the Builder. This includes parts sent to replace merchandise which has been authorized for return to Chief.

Credit will be issued to the Builder's account when the returned merchandise has been accepted by Chief. Chief may refuse to credit your account if the returned merchandise is not in good condition.

Field Modifications

Notification of Field Problems:

The initial claim must be made promptly by either written or verbal notification to Chief's Customer Service Department. Any verbal notification must be followed up in writing within 7 days. The initial claim must include:

1. Description of nature and the extent of the errors, including quantities.
2. Description of nature and the extent of proposed corrective work, including estimated man-hours and costs.
3. Material to be purchased from other than Chief, including estimated quantities and costs.
4. Maximum total cost of proposed corrective work and material to be purchased from other than Chief.

If necessary, Chief may request pictures, field measurements, or other information that will aid in helping to solve the problem.

Authorization MUST be obtained from Chief's Customer Service Department in writing before field modification is made. Authorization identifies the problem and allows Chief to participate in arriving at a solution, it does not assign fault or liability.

Chief cannot be responsible for structures which have been modified without specific authorization. **Any such action may void warranties.**

Backcharge Procedure:

All backcharges must be submitted within 14 (fourteen) days after completion of the corrective work for which prior approved authorization has been given. Failure to submit the backcharge within this time limit will negate Chief's obligation to pay said charges.

Information Required for Submitting the Final Claim:

1. Chief's Order Number.
2. Actual man-hours by date of direct labor use on corrective work and hourly rates of pay.
3. Cost of material (not minor supplies) authorized by Chief to be purchased from other than Chief, including copies of paid invoices.
4. Total actual direct cost of corrective work (sum of 2 and 3).
   The final claim shall be signed and certified true and correct by the Builder. Final claims are paid to the Builder in an amount of the lesser of:
   - Cost set forth in the initial report and subsequent "Authorization for Field Modification",
     or
   - The total actual direct cost of corrective work.
5. The cost of equipment (rental or depreciation), small tools, supervision, overhead and profit are not subject to claim. This includes crane and lift charges.

Looking For Jobsite Resources?

Erector's Toolbox

Snap QR code
or
use web address below

https://secure.chiefind.com/mychief/

Username: **information@chiefind.com**
Password: **gbr2021**

TO BE USED FOR CONSTRUCTION

Safety Data Sheets

Snap QR code
or
use web address below

https://chiefbuildings.cld.bz/Safety-Data-Sheets-SDS

Note: This drawing is not sealed/signed by engineer as it does not contain project specific information thus is not considered a "technical submission".

RELEASED	12-20-24
SUPERSEDES	03-08-24

Drawing	QUALITY ASSURANCE POLICY
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
BD	ALI	B3025326	G1 / G3
2/10/25	3/6/25		

Introduction

The information on this page is intended to be for general erection information. Project-specific information is found within the Chief Buildings "To Be Used for Construction" Erection Drawings and Details. Any deviation from these erection drawings must be based on Chief approval. Also, refer to Chief Buildings standing seam erection manuals, when applicable.

Chief Buildings does not guarantee nor shall we be held liable for the quality of erection, nor assume the responsibility for building defects that may be attributed to improper erection techniques or the negligence of other parties.

Chief Buildings is not responsible for the safety of the erectors. It is the erectors responsibility to follow all OSHA regulations not limited to 29 CFR 1926R.

Unloading Procedures

Arrival at the Jobsite

Chief Buildings components are carefully bundled, crated, and inspected to prevent damage during transportation. When the shipment is received, check each item against the proper shipping documentation for shortages or damages. Damage must be noted on the Bill of Lading. Failure to note damages may result in being unable to file freight claims.

If damage or shortages are suspected, contact Chief's Customer Service team per the Quality Assurance Policy.

Unloading

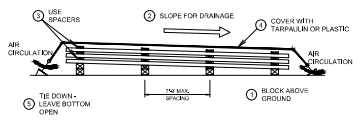
The erector shall use special care in unloading and handling to avoid distorting or damaging structural steel or bundled components. Use slings or spreader bars for long bundles, as required. Where practical, bundles should be placed near installation area to avoid later site maneuvering or undue handling to minimize damage to any shop primer or factory applied panel coatings.

Jobsite Storage

Roof and Wall Panel Bundles

It is recommended that bundles be kept dry. Moisture trapped within panel bundles can cause the finish to soften and become more susceptible to erection handling damage. Panels in bundles that are stored wet, or in humid conditions forming condensation, will form oxidation (white rust) or other moisture related problems to the panel finish or metal substrate. Moisture can wick between panels of bundles and cause deterioration if not prevented. If moisture is evident in bundles that will be stored for a prolonged period, it is recommended that bundles be broke open to air dry.

1. Block bundles above ground to keep water out of bundle and allow air circulation.
2. Slope bundles for drainage.
3. Stack panels with dunnage between bundles.
4. Cover bundles with tarp or plastic to protect from rain or snow.
5. Tie down covered ends away from stack so not to restrict air circulation during the storage period.



Trims and other items shipped in cardboard cartons are treated the same way. Cardboard packaging and contents must be kept dry.

Strippable Film

Panel bundles may have a temporary film applied to panels for protection against scratches and abrasion during shipping & handling. Chief roof products will be marked with a strippable film packaging sticker. Other non-Chief supplied panels may not be marked and should be examined if present. The strippable film is to be removed prior to final erection. However, prolonged storage or storage conditions may cause difficulty in removing strippable film.

- Avoid exposure to direct UV sunlight for more than 48-hours. Store under a temporary shelter or tarp. Avoid excessive heat where possible.
- Optimally, remove strippable film within six months.
- Remove strippable film gradually beginning from one edge with a smooth even motion.
- When temperature is less than 60F, care should be taken to avoid tearing or silvering.
- Residue left over will wear off naturally. If desired, residue can be removed using a citrus-based cleaner (e.g., Simple Green Cleaner® or Goo Gone Pro-Power®) with hot pressure washer and/or lint-free cloths. Do not use petroleum solvents, abrasive cleaners, or strong alkaline/acidic cleaners.

Primed Steel

Primed steel should be kept off the ground and positioned to minimize water holding pockets, dust, mud, and other contaminants that will deteriorate the primer. Shop applied primer is intended to protect the steel for only a short period of exposure to ordinary atmospheric conditions. Chief is not responsible for the deterioration or corrosion that may result from exposure to atmospheric and environmental conditions. If road salt or liquid deicer accumulates during winter shipment, use a mild pressure wash to minimize corrosion.

Bolting Components, Sealants and Mastics

Bolting components, sealants and mastics should be kept in protected storage.

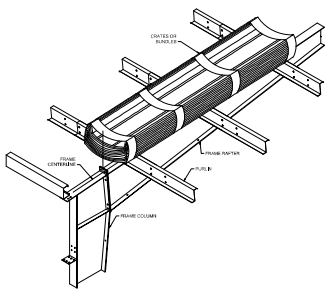
Storage of bolts, nuts, and washers in accordance with RCSC, Specification for Structural Joints using High-Strength Bolts.

- Only as many bolting components as anticipated to be installed during the work shift should be taken from protective storage.
- Bolting components that are not incorporated into work should be returned to protected storage at the end of the work shift.
- Bolting components that accumulate rust or dirt shall not be incorporated into the structure unless they are cleaned and lubricated.

Crates or Bundles on Roof

If roof panel bundles are stored on the roof prior to installation, avoid damage to bundles and roof structure.

- Before placing bundles on the roof, all structural steel must be assembled, plumb and bolts tightened. All flange bracing, X-bracing, and sag angles must be in place.
- Locate panel bundles over center line of frames. Do not locate over jack beams, trusses, or unsupported areas.
- Temporary blocking should be installed between purlins under the panel bundle.
- Storage on roof should only be temporary, and should be properly secure to structure.



Temporary Support

Bracing furnished by Chief Buildings is designed for loads on the completed, fully assembled building structure. This bracing cannot be assumed to be adequate during erection. The erector shall determine the need for, furnish, and install all temporary supports, such as temporary guys, cables, beams, falsework, blocking, erection aids, or other elements required for the erection. Chief Buildings is not responsible for evaluation of the building structure for strength and stability during construction. For additional resources for planning and developing temporary bracing requirements, refer to the Metal Buildings Institute's Temporary Bracing Guidelines.

Temporary blocking may be required between purlins and girts at mid bay prior to ensure they are in alignment until roof or wall paneling is installed.

Erection Tolerances

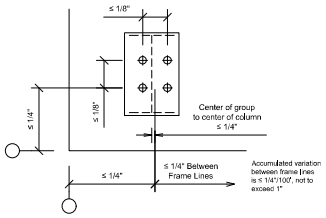
The accumulation of mill tolerances and fabrication tolerances shall not cause the erection tolerances to be exceeded.

Anchor Rods

Anchor rods are set in accordance with the Chief Buildings Erection Drawings Anchor Rod plans.

Recommended tolerances for locating dimensions for Chief Building base plates are as follows:

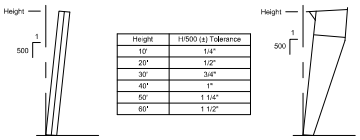
a) Projections listed in the Anchor Rod Summary are minimum values with base plate sitting at specified elevation with assembled nut and washers. For extra leveling or grouting, increase projection accordingly.
b) Recommended tolerance for Chief Buildings Anchor Rod Groups:



Plumb, Level and Aligned

Structural members are considered plumb, level and aligned if the deviation from plum does not exceed 1/500.

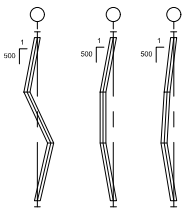
a) Column Plumbness:



Height	H/500 (±) Tolerance
10'	1/4"
20'	1/2"
30'	3/4"
40'	1"
50'	1 1/4"
60'	1 1/2"

At column splices, the variation relative to upper and lower centerlines is ½".

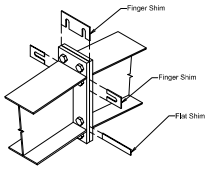
b) Frame Lines:



c) Cranes: When crane support systems or crane runway beams are part of the metal building, additional erection tolerances may be required, but not given here.

Shimming

Some shimming must be anticipated by the erector and is considered a normal part of erection by AISC. Examples of where shims may be required are to fill joint gaps, level beams, accommodate varying depth of members (Crane Runway Beams), level column base plates, or adjust for frame deflection. Shims are provided by the erector. These shims may be thin flat strips, with holes, or finger shims with slots cut through to the edge to be inserted around bolts. The shim should be full flange width.

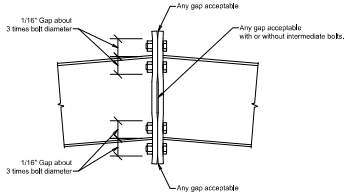


Chief may specify shims on projects to maintain critical clear height elevations, or when specified by contract documents. On these projects, Chief will furnish shims with details and installation instructions within the Chief Buildings Erection Drawings For Construction.

In the event of connection gaps greater than 1/4", contact Chief Customer Service for approval and specific recommendations for proper shimming.

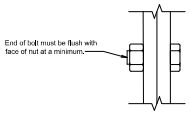
Bolted Connection Plates

End plate connections are to be bolted and tightened to have the plates in firm contact around the bolts. There should be no spaces between them within a circle three times the nominal diameter of the bolt. Gaps in excess of 1/16" in these areas should be tightened further or shims added. Gaps outside of these areas need no corrective action. Including gaps at the outer extremities of the plates due to plate warpage caused by welding do not generally have to be filled if gap around bolt is 1/16" or less.



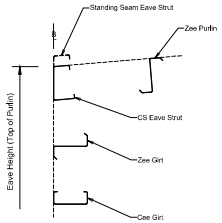
Bolts Minimum Stick-Through

When all bolts have been installed and in the snug-tight condition, the bolt threads must be at least flush with face of nut.



Secondary

Typical orientation of secondary members.



Field Located Framed Openings/Fenestrations

Field located opening require erector to cut members and drill holes. Hole size is 1/16" larger than bolt diameter (1/2" bolt = 9/16" hole). Field work allows for minor adjustment in opening location. Changes in location exceeding 12" or result in cutting other members or interfering with flange braces may only be done after contacting Chief Buildings.

Flange Bracing

Flange braces are essential for the structural strength and stability of the system. All flange braces must be installed in accordance with the erection drawings and details. Any omitting or deviation from the erection drawings must be approved by Chief Buildings.

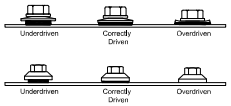
Sealant Application

Proper execution of field applied mastics is vital to the weather tightness of a finished building. Surfaces must be clean and dry before mastic can be applied, and all surfaces make good contact. Do not use tape mastics or sealants if they become dry. Do not stretch tape mastic or cause thinning of the cross section. Carefully follow details and standing seam erection manual instructions for proper mastic location and marrying of mastics and sealants for a continuous seal. Remove protective paper of tape mastics prior to installing panels and trim. Screw placement should be through the taped mastic or on the "dry side" of the sealant, and properly tightened to fully compress the joint.

Fasteners

Screws should be installed per the Chief Buildings Erection Drawings For Construction. Screw identification, style and sizes are found on Standard Parts pages of Erection Drawings. If the screw has stripped, a #17 X 1" WT oversized screw should be used as a replacement. Screw guns with variable speed and adjustable clutch are recommended. Best drilling performance is obtained at slower drill speeds with a 2000 max rpm. Always remove metal shavings from panel and trim surfaces to avoid rust or corrosion to panel finish.

The hole created by the screw is sealed by the washer and proper tightening is crucial for weather tightness.



Additional information on fastening may be found in the MCA Technical Bulletin, *Proper Tools for Fastening Metal Panels*.

Panel Damage, Finish, and Corrosion

Care should be taken to prevent damage to panel surfaces and avoid corrosion to GALVALUME® substrate. Use the following guidelines to prevent corrosion to the coating used on panel and trim:

During Construction

- Cutting panel and trim should only be done with nibblers, snips, or by shearing action to reduce the cut edge exposure. Do not cut panels with saws, abrasive cutters, or grinders.
- Metal shavings from cutting, drilling and fastening should never be left on the roof. This ferrous debris will rust causing staining or corrosion to the roof. The roof should be cleaned and swept daily to remove debris.
- Use felt tip markers when marking panel surfaces. Avoid graphite pencil marks which corrode panels.
- Cement based mortars from masonry or stucco may severely etch the coating of panels. Panels should be protected when work is being performed in this area. Clean off any material that is in contact with panels before it is allowed to dry.
- Avoid lumber to block up or shim mechanical piping. Pressure treated lumber contains chemicals that accelerate corrosion. Other lumber is porous and retains moisture. Panels must be able to freely drain and air dry.
- HVAC condensation drains which can contain traces of copper will discolor and react to panel. Drainage should be discharged through plastic pipes off of the roof system or drained to interior locations.
- Keep copper piping, cable, or gutters from direct contact with panels.
- When fastening roof top accessories, the use of aluminum seam clamps with stainless hardware is preferred. Set screws should be stainless steel and have rounded points so not to gouge or scratch GALVALUME® coating. Locate clamps over panel clips so loads do not transfer into panel seams.

Roof Panel Foot Traffic

Keep foot traffic to a minimum. Wear soft, clean shoes to avoid scratches and marring of finish. Walk in the flat of the panel between the corrugations and, as much as possible, walk at or near the supporting roof structural members. Do not walk on the high ribs, ridge caps, end laps, roof curbs or other penetrations, trims, or gutters. Avoid stepping in areas proximity to flashing or curbing joints and panel laps. Heavy foot traffic can cause ponding on low pitched roofs. This is particularly true just up/down from the eave and at end laps.

Consider restricting free-access to the roof. Allow only personnel that have been instructed in the proper walking pattern.

When heavy or frequent foot traffic is anticipated, use walk boards or fabricated metal walkways to protect the roof. This is particularly useful when regular maintenance of roof top units is required.

General Maintenance

Corrosion: If left unattended, can lead to weathertightness issues or impairment of structural capacity. It is recommended to inspect for cleaning and damage at least annually.

- Areas with exposed sealants or caulking around doors and windows, roof penetrations or mechanical equipment can be susceptible to deterioration from weathering. If this should happen, remove the old caulk, and apply new caulk in its place.
- Do not use HVAC coil cleansers or other aggressive cleaning agents that are highly alkaline.
- Loose fasteners should be tightened.
- Clear all debris (leaves, dirt, etc.) from panel, gutter, and downspouts.
- Winter accumulation of snow and ice should be monitored for drifting, roof deflection, damming or clogging of gutter systems which creates ponding water. Removal of snow and ice should not be performed with metal shovels, picks, axes or other sharp tools to damage the roof coating or roof panel.
- Top coating panel with liquid applied membranes should not be applied to correct improper installation techniques to achieve weathertightness.

Insulation: Any holes or tears in the facing should be repaired with patch tape as supplied by the insulation supplier. Insulation batting loose at various locations within the building (particularly at the eave or base) might not be the result of poor insulation, but rather a strong negative pressure inside the building resulting from an improperly balanced HVAC system or an extra exhaust fan added after the erection of the structure. This, combined with a strong wind outside the building will often result in the insulation coming loose in these areas.

Structural Bolts and Bracing: Structural bolts and bracing normally require no maintenance except in instances where the structure is exposed to vibration, such as a building with an overhead crane. Bolts, including those in crane building connections, should be inspected at least once a year and in accordance with OSHA requirements. Any loose connections should immediately be brought to the tightened condition specified in the For Construction Erection Drawings.

Roof Jack Pipe Flashing (Not by Chief)

Do not use galvanized roof jacks, lead hats or other residential grade roof jacks. These can cause galvanic corrosion of the roof panel, and do not have the required service life.

Use EPDM rubber roof jacks with an integral aluminum band that is bonded into the perimeter of the rubber base. EPDM rubber roof jack pipe flashing generally have a continuous service temperature range up to around 212oF. For higher temperature applications, consider high temp silicone pipe flashings.

Do not use tube sealant to seal the roof jack to the panels or pipe. Use roll tape sealer between roof jack and panel and attach with long life fasteners at approximately 1½" C.C. Install stainless steel clamp around top of roof jack to pipe.

Top Coating Primed Steel

Primed steel may require field touch-up as a result of damage to the primed coating caused by bundling, banding, hooks, chains, forks, foreign material, etc. Rusting may occur at such abrasions. Priming/painting over rust, surface preparations or rust removal techniques depends on the level of protection needed for end use. Clean and re-prime, as required.

Chief Buildings does not recommend or specify topcoat products. Reasons for choosing topcoat can vary. Consult paint supplier to discuss end use for specific application, desired corrosion protection, finish, required cleaning steps and if additional primers are required.

Contact Chief Customer service for availability of primed touch-up paints, Chief Buildings primer data sheets, or color matching information for Chief standard color options.

TO BE USED FOR CONSTRUCTION

Note: This drawing is not sealed/signed by engineer as it does not contain project specific information thus is not considered a "technical submission".

RELEASED	12-20-24
SUPERSEDES	12-18-23

Drawing	GENERAL INFORMATION
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	G2
BD	ALI	B3025326	G3
2/10/25	3/6/25		

COLLATERAL LOADS (see Building Design Criteria):

Chief Buildings neither assumes nor accepts any responsibility for the design of hangers, bracing of suspended members, transverse support members, nor connections to roof purlins to support collateral loads. It is the responsibility of the Buyer/Contractor and/or End Owner to have this design performed by a registered design professional. All loads suspended from purlins shall have the load introduced through the web and not the flange of the purlin other than what is shown on this page. Loads can not be supported from the lip at the edge of the flange.

TYPE 1: Lightweight loads with individual point load not exceeding 75 pounds may be hung from bottom flange ONLY as shown on this page.

TYPE 2: Loads exceeding 75 pounds attach to web utilizing on of the methods shown on this drawing or provided by Registered Design Professional.

Guide to converting uniform collateral load (psf) to individual point loads (pounds).

Equations to calculate maximum load (weight) based on collateral load, purlin spacing, and bay spacing

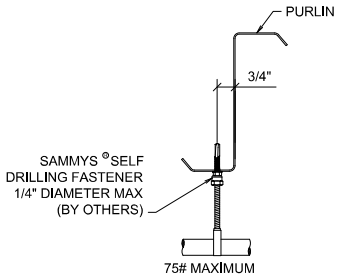
Load Type	Max Point Load [pounds]	Loading Diagram
Single Load at Center of Bay	0.40 x Collateral Load [psf] x Purlin Spacing [ft] x Bay Spacing [ft]	Max Point Load; equal space; equal space; Bay Space; Purlin; Rafter
Two Loads at Third Points	0.30 x Collateral Load [psf] x Purlin Spacing [ft] x Bay Spacing [ft]	Max Point Loads; equal space; equal space; equal space; Bay Space; Purlin; Rafter
Three Loads at Quarter Points	0.20 x Collateral Load [psf] x Purlin Spacing [ft] x Bay Spacing [ft]	Max Point Loads; eq; eq; eq; eq; Bay Space; Purlin; Rafter
3'-0 Spacing	Collateral Load [psf] x Purlin Spacing [ft] x 3.0'	Max Point Loads; Loads @ 3'-0" Spacing; Purlin; Rafter
2'-0 Spacing	Collateral Load [psf] x Purlin Spacing [ft] x 2.0'	Max Point Loads; Loads @ 2'-0" Spacing; Purlin; Rafter

Examples

3 psf collateral load, 4'-6" [4.5'] purlin spacing, 25'-0" bay spacing

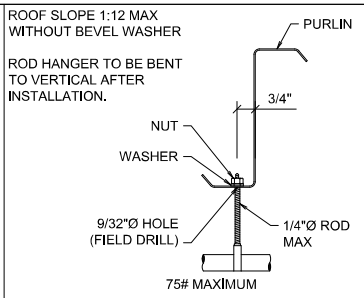
Max Point Loads:

- Single Load at Center of Bay = 135 pounds at each load
- Two Loads at Third Points = 101 pounds at each load
- Three Loads at Quarter Points = 68 pounds at each load
- 3'-0" Spacing = 41 pounds at each load
- 2'-0" Spacing = 27 pounds at each load



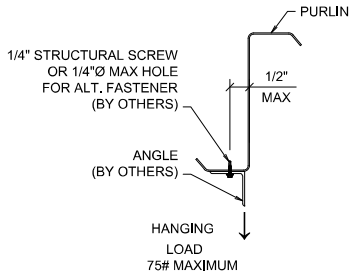
HANGER DETAIL AT PURLINS SAMMYS® CONNECTION

TYPE I



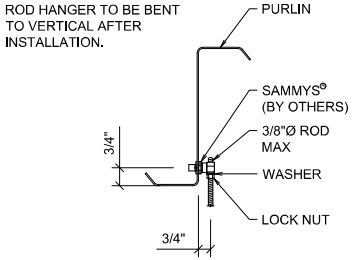
HANGER DETAIL AT PURLINS NUT/WASHER CONNECTION

TYPE I



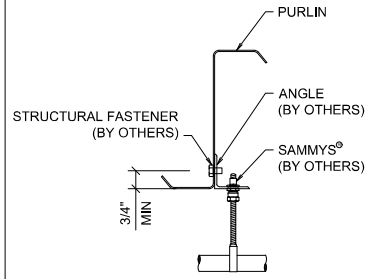
HANGER DETAIL AT PURLINS CONNECTION

TYPE I



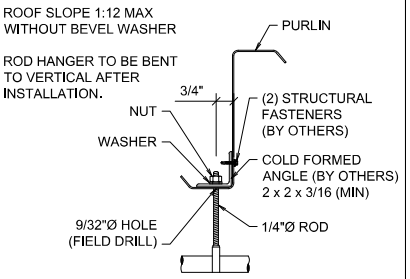
HANGER DETAIL AT PURLINS SAMMYS® CONNECTION

TYPE II



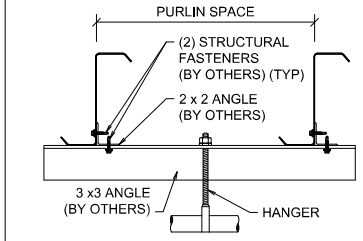
HANGER DETAIL AT PURLINS SAMMYS® CONNECTION

TYPE II



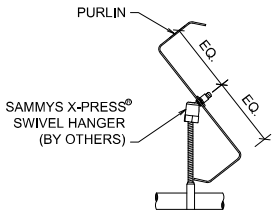
HANGER DETAIL AT PURLINS NUT/WASHER CONNECTION

TYPE II



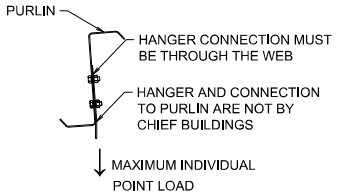
HANGER DETAIL AT PURLINS ANGLE ATTACHMENT

TYPE II



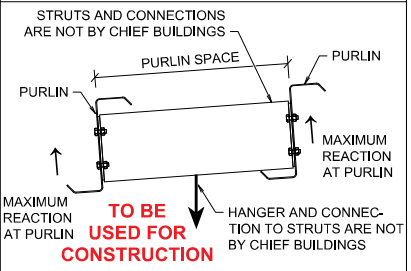
HANGER DETAIL AT PURLINS SWIVEL CONNECTION

TYPE II



HANGER DETAIL AT INDIVIDUAL ZEE PURLIN

TYPE II



HANGER DETAIL BETWEEN ZEE PURLINS

TYPE II

RELEASED	12-18-23
SUPERSEDES	07-13-22

REVISIONS

4
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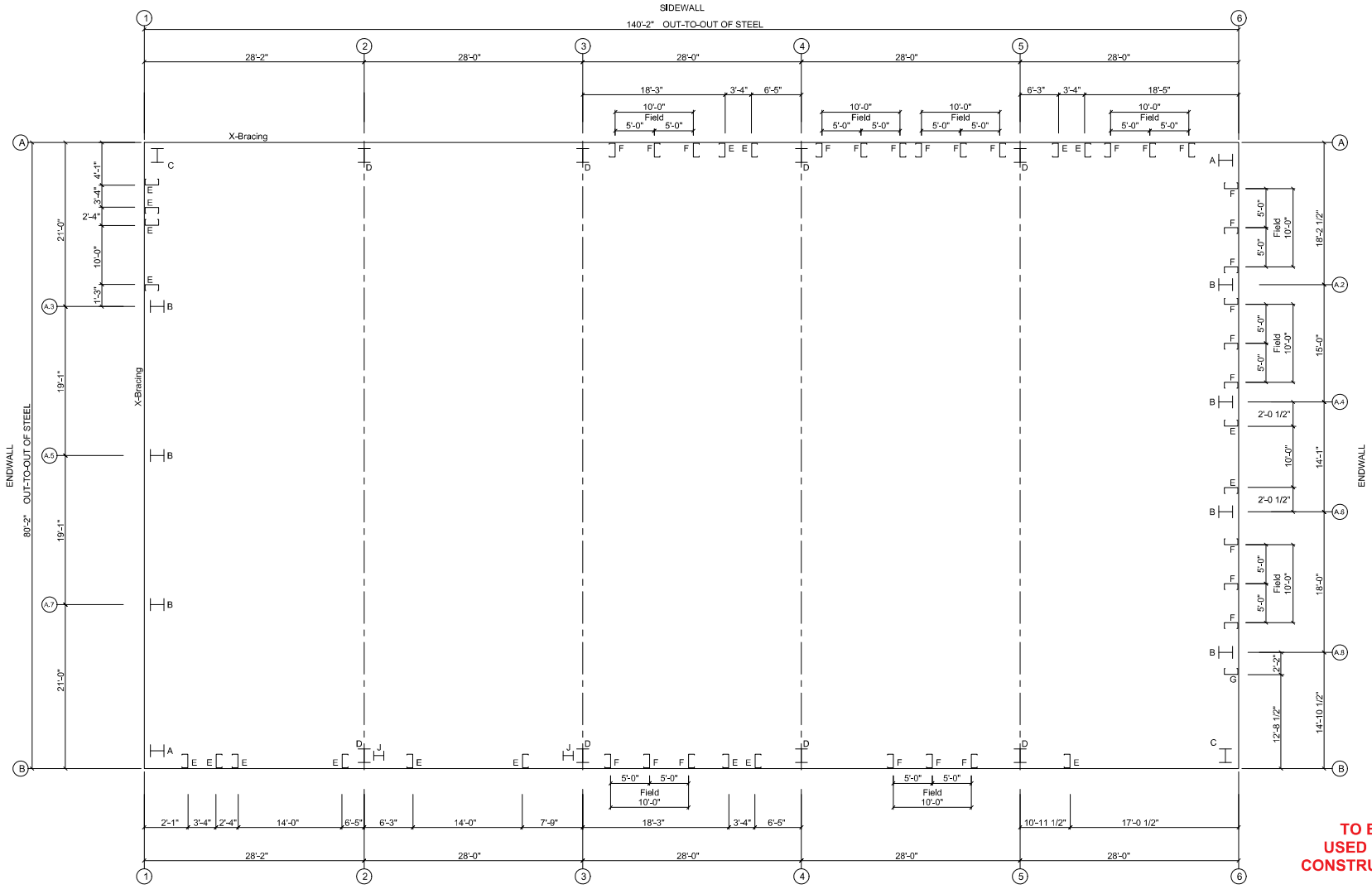
Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 385-7289 cs@chiefmfd.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

Drawing	COLLATERAL LOADING AND ATTACHMENTS			
Buyer	Triangle Home Pros, LLC			
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526			
Project Name	E & M Concrete			
CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	G3
	BD	ALI	B3025326	
	2/10/25	3/6/25		G3



ANCHOR ROD PLAN

NOTE: All Base Plates @ 100'-0" (U.N.)

TO BE USED FOR CONSTRUCTION

REFERENCE NOTES:

1. All Anchor Rods including nuts and washers for same are not furnished by CHIEF BUILDINGS.
2. Anchor Rod material shall conform to ASTM F1554 having a yield of 36 KSI or greater.
3. Rod projections are recommended minimums based on the base plate bearing directly on the concrete pier. If the base plate is to bear on grout, the rod projection must be increased accordingly.
4. Concrete shall have a minimum strength of 3000 PSI.
5. ALL DRAWINGS ARE NOT TO SCALE.
6. Anchor Rod Summary Table
   - Quantity includes all buildings, all phases.
   - However anchor rods for Partitions and Smart Canopies are found on separate pages (when applicable).

NOTE: Finish Floor @ 100'-0"

ANCHOR ROD SUMMARY

Qty	Locate	Dia (in)	Type	Proj (in)
94	Jamb	1/2"	F1554	1.50
44	Endwall	3/4"	F1554	2.00
32	Frame	3/4"	F1554	2.00
12	WindCol	3/4"	F1554	2.00

REVISIONS	
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Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7269 ca@chiefind.com

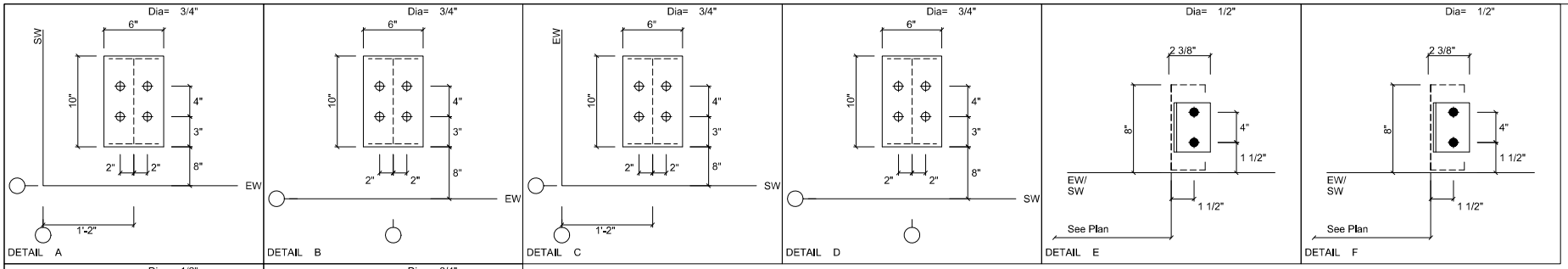
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

Drawing	ANCHOR ROD
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	A1
DAR	DAR	B3025326	A3
1/31/25	2/3/25		



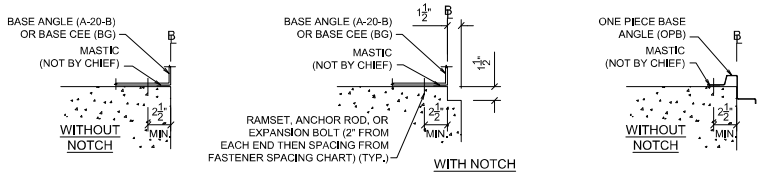
BASE ANCHORAGE SPACING FOR STANDARD BASE ANGLE, BASE CEE OR ONE PIECE BASE WITH CS OR AP WALLS			
FASTENER TYPE & DIAMETER		MINIMUM EMBEDMENT	MAXIMUM SPACING
1/4" WEDGE ANCHOR	①	1 1/4"	1 @ 3'-0"
1/4" SCREW TYPE ANCHOR	②	1 1/2"	1 @ 3'-0"
3/8" CAST-IN ANCHOR		4" WITH HOOK OR HEAD	1 @ 3'-0"
1/4" HAMMER-IN	③	1 3/8"	1 @ 2'-0"
0.14 POWDER ACTUATED	④	1 1/4"	1 @ 1'-6"

① HILTI KWIK BOLT®, RAMSET TRUBOLT®, POWERS POWERSTUD®, OR EQUAL
② CFS TAPCON®, HILTI KWIK-CON II®, POWERS WEDGE-BOLT®, OR EQUAL
③ POWERS ZAMAC HAMMER SCREW®, HILTI METAL HIT ANCHORS, OR EQUAL
④ POWERS BALLISTIC POINT PIN, RAMSET 1500/1600 SERIES, HILTI UNIVERSAL NAIL OR EQUAL

FASTENER SPACING CHART

REFERENCE NOTES:

1. ACTUAL BASE PLATE DIMENSIONS MAY BE SMALLER THAN BASE PLATE DIMENSIONS SHOWN.



BASE MEMBER DETAILS

CONTRACTOR IS RESPONSIBLE FOR ANCHORING BASE MEMBER TO CONCRETE.

TO BE USED FOR CONSTRUCTION

REVISIONS	
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Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7269 ca@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

Drawing	ANCHOR ROD
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
DAR	DAR	B3025326	A2
1/31/25	2/3/25		A3

1. Column footings and piers must be designed to withstand horizontal and vertical reactions as shown on the Anchor Rod Plan. Chief Buildings is not responsible for design of concrete foundation. Chief Buildings recommends that the services of a qualified engineer be obtained by the contractor/builder to design the foundations for the indicated reactions.
2. Reactions are given in kips. (1 kip = 1000 lbs.) moments, if any, are given in kip-ft.
3. Anchor Rod design is based on shear, tension, and combined tension and shear. Chief Buildings is not responsible for anchor rod size recommendations when anchor rod configuration places the rods in a bending mode. When the column base plate bears on grout, the contractor/builder or foundation engineer shall investigate bending in the anchor rods and provide a shear key for the column base to the pier when the anchor rods are not adequate in bending about the pier.

ENDWALL COLUMN: BASIC COLUMN REACTIONS (k)

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind_Left1 Horz	Wind_Left1 Vert	Wind_Right1 Horz	Wind_Right1 Vert	Wind_Left2 Horz	Wind_Left2 Vert	Wind_Right2 Horz	Wind_Right2 Vert
1	A	0.8	0.7	2.6	1.5	0.0	-3.2	0.0	-2.5	0.0	-2.0	0.0	-1.3
1	A.3	1.7	1.8	6.4	3.6	-3.1	-12.6	0.0	-0.5	-3.1	-10.0	0.0	2.0
1	A.5	1.4	1.3	4.9	2.8	0.0	-0.3	3.1	-8.9	0.0	0.9	3.1	-7.6
1	A.7	1.7	1.8	6.4	3.6	0.0	-5.1	0.0	-8.6	0.0	-2.5	0.0	-6.0
1	B	0.8	0.7	2.6	1.5	0.0	-2.5	0.0	-3.2	0.0	-1.3	0.0	-2.0

Frm Line	Col Line	Wind_Press Horz	Wind_Press Vert	Wind_Suct Horz	Wind_Suct Vert	Wind_Long1 Horz	Wind_Long1 Vert	Wind_Long2 Horz	Wind_Long2 Vert	Seis_Left Horz	Seis_Left Vert	Seis_Right Horz	Seis_Right Vert	Seis_Long Horz	Seis_Long Vert
1	A	-7.7	-5.0	0.0	5.0	0.0	-3.5	0.0	-2.2	0.0	0.0	0.0	0.0	-5.7	-3.7
1	A.3	-3.8	0.0	4.2	0.0	0.0	-7.1	-1.0	-6.1	-1.4	-1.8	0.0	2.1	0.5	0.0
1	A.5	-4.2	0.0	4.7	0.0	1.0	-5.3	0.0	-2.5	0.0	1.9	1.4	-2.1	0.6	0.0
1	A.7	-3.8	0.0	4.2	0.0	0.0	-4.7	0.0	-8.6	0.0	-0.1	0.0	0.1	0.5	0.0
1	B	0.0	0.0	0.0	0.0	0.0	-2.2	0.0	-3.5	0.0	0.0	0.0	0.0	0.0	0.0

Frm Line	Col Line	-MIN_SNOW-- Horz	-MIN_SNOW-- Vert	E1UNB_SL_L- Horz	E1UNB_SL_L- Vert	E1UNB_SL_R- Horz	E1UNB_SL_R- Vert	E1PAT_LL_1- Horz	E1PAT_LL_1- Vert	E1PAT_LL_2- Horz	E1PAT_LL_2- Vert	E1PAT_LL_3- Horz	E1PAT_LL_3- Vert	E1PAT_LL_4- Horz	E1PAT_LL_4- Vert
1	A	0.0	2.1	0.0	1.4	0.0	0.5	0.0	2.4	0.0	-0.2	0.0	0.0	0.0	2.7
1	A.3	0.0	5.2	0.0	4.4	0.0	0.8	0.0	6.6	0.0	2.4	0.0	-0.3	0.0	3.4
1	A.5	0.0	4.0	0.0	3.5	0.0	3.5	0.0	2.4	0.0	6.2	0.0	2.4	0.0	2.4
1	A.7	0.0	5.2	0.0	0.8	0.0	4.4	0.0	-0.3	0.0	2.4	0.0	6.6	0.0	3.0
1	B	0.0	2.1	0.0	0.5	0.0	1.4	0.0	0.0	0.0	-0.2	0.0	2.4	0.0	-0.3

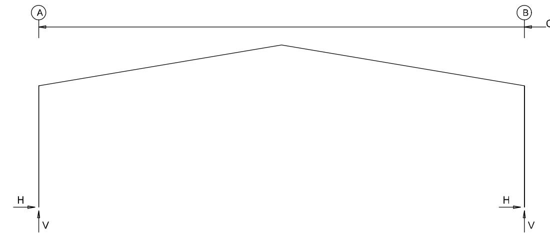
Frm Line	Col Line	E1PAT_LL_5- Horz	E1PAT_LL_5- Vert
1	A	0.0	-0.3
1	A.3	0.0	3.0
1	A.5	0.0	2.4
1	A.7	0.0	3.4
1	B	0.0	2.7

Frm Line	Col Line	Dead Vert	Collat Vert	Live Vert	Snow Vert	Wind Left1 Vert	Wind Right1 Vert	Wind Left2 Vert	Wind Right2 Vert	Wind Press Horz	Wind Suct Horz	Wind Long1 Vert	Wind Long2 Vert
6	B	0.6	0.5	2.0	1.1	-2.2	-1.3	-1.3	-0.5	0.0	0.0	-2.1	-1.5
6	A.8	1.4	1.5	5.5	2.9	-6.8	-4.2	-4.8	-2.1	-3.0	3.3	-6.8	-3.8
6	A.6	1.3	1.2	4.9	2.6	-5.8	-3.7	-4.2	-2.2	-3.4	3.8	-5.5	-3.2
6	A.4	1.1	0.9	3.7	2.0	-2.8	-4.4	-1.6	-3.3	-3.1	3.4	-2.3	-4.1
6	A.2	1.5	1.5	5.8	3.0	-4.4	-7.1	-2.2	-5.0	-3.1	3.4	-4.1	-7.2
6	A	0.8	0.6	2.6	1.4	-1.7	-2.8	-0.8	-1.8	0.0	0.0	-1.9	-2.8

Frm Line	Col Line	Seis Left Vert	Seis Right Vert	Seis Long Horz	-MIN_SNOW-- Horz	-MIN_SNOW-- Vert	E2UNB_SL_L- Horz	E2UNB_SL_L- Vert	E2UNB_SL_R- Horz	E2UNB_SL_R- Vert	E2PAT_LL_1- Horz	E2PAT_LL_1- Vert	E2PAT_LL_2- Horz	E2PAT_LL_2- Vert
6	B	0.0	0.2	0.0	0.0	1.5	0.0	1.1	0.0	0.3	0.0	1.6	0.0	-0.3
6	A.8	0.0	0.0	0.4	0.0	4.1	0.0	2.9	0.0	0.9	0.0	5.7	0.0	2.8
6	A.6	0.0	-0.1	0.5	0.0	3.7	0.0	4.3	0.0	1.1	0.0	3.0	0.0	5.5
6	A.4	-0.1	-0.1	0.4	0.0	2.8	0.0	0.9	0.0	3.8	0.0	-0.4	0.0	1.7
6	A.2	0.0	0.0	0.4	0.0	4.4	0.0	0.9	0.0	3.1	0.0	0.0	0.0	-0.1
6	A	0.2	0.0	0.0	0.0	1.9	0.0	0.4	0.0	1.4	0.0	0.0	0.0	0.0

Frm Line	Col Line	E2PAT_LL_3- Horz	E2PAT_LL_3- Vert	E2PAT_LL_4- Horz	E2PAT_LL_4- Vert	E2PAT_LL_5- Horz	E2PAT_LL_5- Vert	E2PAT_LL_6- Horz	E2PAT_LL_6- Vert
6	B	0.0	0.0	0.0	0.0	0.0	2.7	0.0	-0.8
6	A.8	0.0	-0.1	0.0	0.0	0.0	2.5	0.0	3.0
6	A.6	0.0	1.8	0.0	-0.2	0.0	1.5	0.0	3.4
6	A.4	0.0	5.0	0.0	2.0	0.0	1.1	0.0	2.6
6	A.2	0.0	2.1	0.0	6.0	0.0	3.4	0.0	2.4
6	A	0.0	0.0	0.0	2.2	0.0	3.0	0.0	-0.6

FRAME LINES: 2 3 4 5



RIGID FRAME: MAXIMUM REACTIONS

Frm Line	Col Line	Column_Reactions(k) Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin
2*	A	5	18.3	28.1	1	-8.1	-9.2
					3	-1.9	-10.5
2*	B	2	8.1	-9.2	5	-18.3	28.0
		5	-18.3	28.0	2	8.1	-9.2

2* Frame lines: 2 3 4 5

RIGID FRAME: BASIC COLUMN REACTIONS (k)

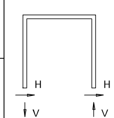
Frame Line	Column Line	-----Dead---- Horz	Vert	--Collateral- Horz	Vert	-----Live---- Horz	Vert	-----Snow---- Horz	Vert	--Wind_Left1- Horz	Vert	-Wind_Right1- Horz	Vert
2*	A	2.9	5.0	4.0	6.0	9.1	13.8	8.0	12.0	-16.5	-20.4	-3.0	-13.0
2*	B	-2.9	5.0	-4.0	5.9	-9.1	13.8	-8.0	12.0	3.0	-13.0	16.5	-20.4

Frame Line	Column Line	--Wind_Left2- Horz	Vert	-Wind_Right2- Horz	Vert	--Wind_Long1- Horz	Vert	--Wind_Long2- Horz	Vert	-Seismic_Left Horz	Vert	Seismic_Right Horz	Vert
2*	A	-14.1	-12.3	-0.6	-4.8	-6.0	-22.6	-7.3	-19.6	-2.1	-1.0	2.1	1.0
2*	B	0.6	-4.8	14.1	-12.3	7.3	-14.6	6.0	-17.6	-2.1	1.0	2.1	-1.0

Frame Line	Column Line	-Seismic_Long Horz	Vert	-MIN_SNOW-- Horz	Vert	F1UNB_SL_L- Horz	Vert	F1UNB_SL_R- Horz	Vert
2*	A	0.0	-3.7	11.4	17.1	7.2	12.2	7.2	7.3
2*	B	0.0	0.0	-11.4	17.1	-7.2	7.3	-7.2	12.2

2* Frame lines: 2 3 4 5

WIND BENT REACTIONS



Wall Loc	Wall Line	Col Line	± Reactions Wind(k) Horz	Wind(k) Vert	Seismic(k) Horz	Seismic(k) Vert
F_SW	B	2	3.8	5.4	2.9	4.0
F_SW	B	3	3.8	5.4	2.9	4.0

CONTROLLING LOAD CASES

1 0.6Dead+0.6Wind_Left1
2 0.6Dead+0.6Wind_Right1
3 0.6Dead+0.6Wind_Long1L
4 0.6Dead+0.6Wind_Long2L
5 Dead+Collateral+MIN_SNOW
6 0.6Dead+0.6Wind_Pressure+0.6Wind_Long1L
7 1.02Dead+1.02Collateral+0.75Live+0.53Seismic_LongR
8 0.6Dead+0.6Wind_Left1+0.6Wind_Suction
9 Dead+Collateral+E1PAT_LL_1
10 0.6Dead+0.6Wind_Right1+0.6Wind_Suction
11 Dead+Collateral+E1PAT_LL_2
12 0.6Dead+0.6Wind_Suction+0.6Wind_Long2L
13 0.6Dead+0.6Wind_Pressure+0.6Wind_Long2L
14 Dead+Collateral+E1PAT_LL_3
15 Dead+Collateral+E1PAT_LL_5
16 Dead+Collateral+E2PAT_LL_5
17 0.6Dead+0.6Wind_Suction+0.6Wind_Long1L
18 Dead+Collateral+E2PAT_LL_1
19 Dead+Collateral+E2PAT_LL_2
20 Dead+Collateral+E2PAT_LL_3
21 Dead+Collateral+E2PAT_LL_4

ENDWALL COLUMN: MAXIMUM REACTIONS

Frm Line	Col Line	Column_Reactions(k) Load Id	Hmax H	V Vmax	Load Id	Hmin H	V Vmin
1	A	3	0.0	-1.6	6	-4.6	-4.6
		7	0.0	5.4			
1	A.3	8	2.5	-6.6	6	-2.3	-3.2
		9	0.0	10.1	8	2.5	-6.6
1	A.5	10	2.8	-4.5	6	-2.5	-2.4
		11	0.0	8.9	10	2.8	-4.5
1	A.7	12	2.5	-4.2	13	-2.3	-4.2
		14	0.0	10.1	12	2.5	-4.2
1	B	4	0.0	-1.6	4	0.0	-1.6
		15	0.0	4.1			
6	B	1	0.0	-0.9	1	0.0	-0.9
		16	0.0	3.9			
6	A.8	17	2.0	-3.3	6	-1.8	-3.3
		18	0.0	8.6	17	2.0	-3.3
6	A.6	8	2.3	-2.7	6	-2.0	-2.5
		19	0.0	8.1	8	2.3	-2.7
6	A.4	10	2.0	-2.0	13	-1.9	-1.8
		20	0.0	7.0	10	2.0	-2.0
6	A.2	12	2.1	-3.4	13	-1.9	-3.4
		21	0.0	8.9	12	2.1	-3.4
6	A	2	0.0	-1.3	2	0.0	-1.3
		16	0.0	4.4			

BUILDING BRACING REACTIONS

Wall Loc	Wall Line	Col Line	± Reactions(k) Wind Horz	Wind Vert	Seismic Horz	Seismic Vert	Panel_Shear (lb/ft) Wind	Panel_Shear (lb/ft) Seis	Note
L_EW	1	A.3,A.5	3.1	4.1	1.4	1.9			
F_SW	B	2,3							(a)
R_EW	6								(i)
B_SW	A	2,1	7.7	5.0	5.7	3.7			

(a)Wind bent in bay
(i)Bracing in roof to rigid frame

Reactions for seismic represent shear force, Eh
Reaction values shown are unfactored

TO BE USED FOR CONSTRUCTION

DESCRIPTIONS OF REACTION ABBREVIATIONS

ABBREVIATION	DESCRIPTION
DL	DEAD
CL OR COLL	COLLATERAL
LL	LIVE
SL	SNOW
DRIFT	SNOW DRIFT
SLIDE	SLIDING SNOW
WL1 OR WIND_L1	WIND 1 LEFT (WITH POSITIVE INTERNAL PRESSURE, +GCPI)
WR1 OR WIND_R1	WIND 1 RIGHT (WITH POSITIVE INTERNAL PRESSURE, +GCPI)
WL2 OR WIND_L2	WIND 2 LEFT (WITH NEGATIVE INTERNAL PRESSURE, -GCPI)
WR2 OR WIND_R2	WIND 2 RIGHT (WITH NEGATIVE INTERNAL PRESSURE, -GCPI)
LW1 OR LNWIND1	LONGITUDINAL WIND, CASE 1
LW2 LNWIND2	LONGITUDINAL WIND, CASE 2
WP	WIND PRESSURE
WS	WIND SUCTION
SEISL OR SEIS_L	SEISMIC LEFT
SEISR OR SEIS_R	SEISMIC RIGHT
LNSEIS OR LN_SEISMIC	LONGITUDINAL SEISMIC
TEMP	TEMPERATURE CHANGE
LW1_L2E	LONGITUDINAL WIND, CASE 1, WIND LEFT EDGE ZONE 2E
LW1_R2E	LONGITUDINAL WIND, CASE 1, WIND RIGHT EDGE ZONE 2E
LW2_L3E	LONGITUDINAL WIND, CASE 2, WIND LEFT EDGE ZONE 3E
LW2_R3E	LONGITUDINAL WIND, CASE 2, WIND RIGHT EDGE ZONE 3E
E#PAT_LL_*	ENDWALL PATTERN LIVE (1 - LEFT, 2 - RIGHT ENDWALL)
E#PAT_SL_*	ENDWALL PATTERN SNOW (1 - LEFT, 2 - RIGHT ENDWALL)
F#PAT_LL_*	RIGID FRAME PATTERN LIVE
F#PAT_SL_*	RIGID FRAME PATTERN SNOW
E#UNB_SL_L	ENDWALL UNBALANCED SNOW LEFT
E#UNB_SL_R	ENDWALL UNBALANCED SNOW RIGHT
F#UNB_SL_L	RIGID FRAME UNBALANCED SNOW LEFT
F#UNB_SL_R	RIGID FRAME UNBALANCED SNOW RIGHT
F#CRANEA*	CRANE LOADING, SINGLE CRANE
F#CRNA2 $	A2 - TWO LARGEST CRANES IN ANY AISLE
F#CRNAM $$	AM - SIMPLE MAXIMUM SIZE IN ONE AISLE
F#CRNA $$	A - SINGLE CRANE IN ONE AISLE
F#CRNBM $	BM - LARGEST CRANE IN EACH AISLE FOR TWO ADJACENT AISLE
F#CRNC2 $	C2 - TWO CRANES IN ANY AISLE PLUS ONE CRANE IN ANY NON-ADJACENT AISLE. ALSO SINGLE CRANE AT C2 LOCATION AND DOUBLE CRANE AT OTHER LOCATION.
F#CRN B $$	B - SINGLE CRANE IN TWO ADJACENT AISLES
F#CRN C $$	C - SINGLE CRANE IN TWO NON-ADJACENT AISLES

THIS TABLE PROVIDES A DESCRIPTION OF ABBREVIATIONS FOR COMMONLY USED REACTIONS/LOADS.

1/31/25 1:07pm

REVISIONS

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Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7289 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297
03/11/2025

Drawing	ANCHOR ROD
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	A3
DAR	DAR	B3025326	A3
1/31/25	2/3/25		

DESIGN CRITERIA

DESIGN CRITERIA	
Building Code	North Carolina Building Code 2018
IBC Risk Category	II - Standard Buildings
Roof Live Load	20 psf
Tributary Area Reduction Allowed	Yes
Collateral Load	5 psf
Ground Snow Load (Pg)	15 psf
Exposure Factor (Ce)	1
Thermal Factor (Ct)	1
Importance Factor (I)	1
Flat Roof Snow Load (Pf)	10.50 psf
Minimum Roof Snow Load (Pm)	15 psf - Not used with drift, sliding, unbalanced, or partial loads.
Drift Surcharge Load, Pd and Snow Drift Width, w	Pd = 55.73 - 38.95 psf , w = 4.2083 on Canopies @ Lines 1 & 6
	Pd = 42.19 - 25.41 psf , w = 4.2083 on Canopies @ Lines A & B
Building Enclosure	Enclosed
Ultimate Design Wind Speed (Vult)	115 mph (GCpi ± 0.18)
Nominal Design Wind Speed (Vasd)	89 mph
Exposure Category	B
Wind Pressure (q)	20.1 psf
Seismic	
Spectral Response Short Periods (Ss)	0.17
Spectral Response 1 s Period (S1)	0.082
Seismic Importance Factor	1
Seismic Design Category	B
Site Class	D
Seismic Resisting System	
Longitudinal Direction	Steel System (R=3.00)
Lateral Direction	Steel System (R=3.00)
Seismic Response Coefficient (Cs)	0.06
Spectral Response Parameter Short Period (SDS)	0.181
Spectral Response Parameter 1 s Period (SD1)	0.131
Analysis Procedure:	ELF
Base Shear	13.76 kips
Other Loads:	(4) 207 lbs AHU Point Loads
	(1) 172 lbs AHU Point Load
	(8) 3 psf Tie-Rod Canopies
DEFLECTION CRITERIA	
The material supplied by Chief Buildings has been designed with the following minimum deflection criteria.	
The actual deflection may be less depending on actual load and specific member length.	
Vertical Deflection	
Purlin under Live or Snow	L/ 240
Purlin under Wind	L/ 240
Frame Rafter under Live or Snow	L/ 240
Horizontal Deflection	
Girts supporting metal wall panel (10 year wind)	L/ 600
Spandrel supporting brittle wall material (10 year wind)	L/ 600
Frame Sidesway/Drift with 10 year wind	
Metal wall panel	EH/ 60
Brittle wall material	EH/ 100
Method of Design Used: ASD	

BOLT TIGHTENING INFORMATION - SNUG TIGHT

1. Snug Tightened Joints are used. Tightening of bolts shall be in accordance with the "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS" latest edition published by Research Council on Structural Connections (RCSC).
   a. All bolt holes shall be aligned to permit insertion of the bolts without undue damage to the threads.
   b. Bolts shall be placed in all holes and nuts threaded to complete the assembly.
   c. Compacting the joint to the snug-tight condition shall progress systematically from the most rigid part of the joint. Snug tight is the condition that exists when all of the plies in a connection have been pulled into firm contact by the bolts in the joint and all of the bolts in the joint have been tightened sufficiently to prevent the removal of the nuts without the use of a wrench.
      - The snug tightened condition is typically achieved with a few impacts of an impact wrench or the full effort of a worker on an ordinary spud wrench. More than one cycle through the bolt pattern may be required to achieve the snug tightened joint.
2. Special Inspection - Inspection that installation achieved snug tightened condition is after bolt installation. Unless local authorities require otherwise, inspection before or during bolt installation/tightening is not required.
3. Fastener components shall be protected from dirt and moisture in closed containers at the site of installation. Only as many fastener components as are anticipated to be installed during the work shift shall be taken from protected storage. Fastener components that are not incorporated into the work shall be returned to protected storage at the end of the work shift.

MASONRY/BRICK VENEER WALL

The structure provided by Chief Buildings has a brick veneer wall, which is not by Chief Buildings. The girts are at 2'-0" spacing and have been designed to provide lateral support for the brick veneer wall. The 26 gage CS or AP wall panels behind the wall is intended as a weather barrier and is not intended to support the attachment of the brick wall. Attachment of the brick wall must be made through the CS/AP panel to the girt. Chief Buildings neither assumes nor accepts any responsibility for design of this brick veneer wall nor attachment or interface of this wall with the structure provided by Chief Buildings.

It is the responsibility of the Buyer/Contractor and/or End Owner to retain the services of a registered design professional that is responsible for the design of:

1.) The brick veneer wall and required reinforcing for code prescribed vertical and lateral loads and sufficient ductility to allow for differential movement of the brick veneer wall and the structure provided by Chief Buildings.
2.) Attachment of the brick veneer wall to the structure provided by Chief Buildings.
3.) Detailing at base of the wall and at isolation joints at perpendicular walls to allow for differential movement of the brick veneer wall and the structure provided by Chief Buildings.

Lateral deflection and drift limits for the structure provided by Chief Buildings have been held to the limits in the order documents. These serviceability limits are consistent with those published in AISC Design Guide Series Number 3-Serviceability Design Considerations for Low-Rise Buildings. It is the responsibility of the registered design professional to insure design of the brick veneer wall is compatible with these serviceability limits.

BRITTLE WALL, General Notes

The structure provided by Chief Buildings has been designed for brittle wall provided by others. Chief Buildings neither assumes nor accepts any responsibility for design of the brittle wall nor the attachment or the interface of this wall with the structure provided by Chief Buildings.
It is the responsibility of the Buyer/Contractor and/or End Owner to retain the services of a registered design professional who is responsible for the design of:

1. The brittle wall for code prescribed vertical and lateral forces and sufficient ductility to allow for differential movement of the brittle wall and structure provided by Chief Buildings.
2. Detailing at base of the wall and at isolation joints at perpendicular walls to allow for differential movement of the brittle wall and structure provided by Chief Buildings.

Lateral deflection and drift for the structure provided by Chief Buildings have been held to the limits stated in the order documents. It is the responsibility of the registered design professional to insure design and separation of the brittle wall is compatible with these serviceability limits.

SUSPENDED LOADS

MISC

The roof framing is designed to adequately support the following uniform loads from superimposed structure:

(1) 172 lbs AHU point load
(4) 207 lbs AHU point loads

Chief Buildings is NOT responsible for lateral or longitudinal bracing of the Superimposed Structure subjected to horizontal service, seismic, or wind loading.

MATERIAL SPECIFICATIONS

Chief Buildings designs and fabricates using the following ASTM material types and grades (minimum yield point, ksi).

- Built-up Structural Steel Members: A529, A572, and A1011 SS or HSLAS. Minimum Grade 50 (50 ksi).
- Hot-Rolled Structural Steel Shapes (W, C, S): A572 and A992. Minimum Grade 50 (50 ksi).
- HSS Round and Square Sections: A500. Minimum Grade C (46 ksi and 50 ksi, respectively).
- Hot-Rolled Angle and Rod Bracing: A36, Minimum Yield Point 36 ksi.
- Cold-formed Light Gauge Structural Members: A563 SS or HSLAS-Class 1, A1011 SS or HSLAS-Class 1. Grade 55 (55 ksi).
- Panel and Trim: A792, Minimum Grade 50 Class 1 or Class 4 (50 ksi).

INDEPENDENT MEZZANINE

The building provided by Chief Buildings does not include structural support for the mezzanine, which is furnished by others.

TO BE USED FOR CONSTRUCTION

REVISIONS

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Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7289 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. HOFF
03/11/2025

Drawing	PROJECT NOTES		
Buyer	Triangle Home Pros, LLC		
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526		
Project Name	E & M Concrete		
DRAWN	CHECK	ORDER NO.	N1
MK	MLH	B3025326	
1/27/2025	1/30/25		N1

CHIEF BUILDINGS

SPLICE BOLT TABLE

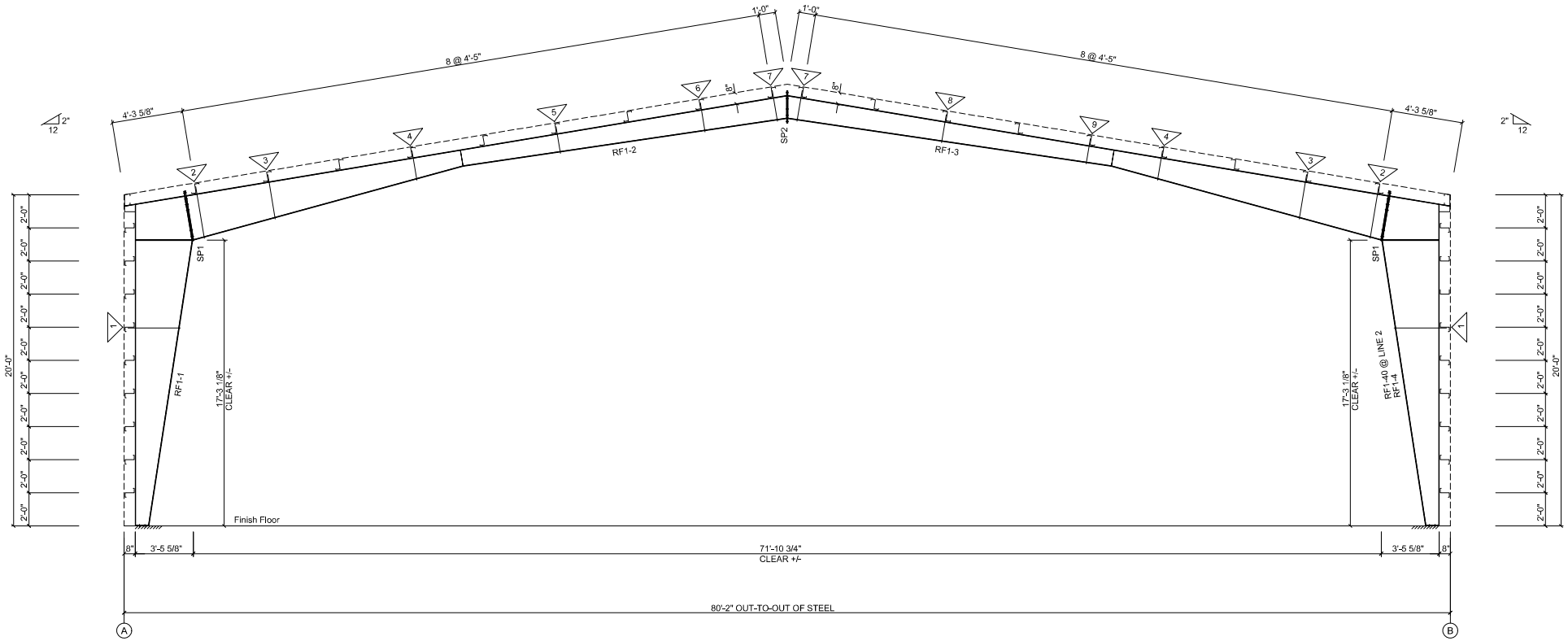
Mark	Qty Top	Bot	Int	Type	Dia	Length
SP1	8	4	0	A325	5/8"	2 1/4"
SP2	4	6	0	A325	5/8"	2"

MEMBER TABLE

Mark	Weight	Length	Web Depth Start/End	Web Plate Thick	Web Plate Length	Outside Flange Thk x W x Length	Inside Flange Thk x W x Length
RF1-1	789	19'-5 1/4"	9.4/41.0	0.250	19'-10 3/8"	1/4" x 6 x 19'-4 3/8" 5/16" x 6 x 3'-8 3/8"	3/8" x 6 x 17'-4 5/16"
RF1-2	934	36'-10 5/8"	32.0/11.5 11.5/16.0	0.219 0.125	16'-9 9/16" 20'-0"	5/16" x 6 x 36'-9 9/16"	3/8" x 6 x 16'-10 9/16" 1/4" x 6 x 19'-9 5/16"
RF1-3	934	36'-10 5/8"	16.0/11.5 11.5/32.0	0.125 0.219	20'-0" 16'-9 9/16"	5/16" x 6 x 36'-9 9/16"	1/4" x 6 x 19'-9 5/16" 3/8" x 6 x 16'-10 9/16"
RF1-4	795	19'-5 1/4"	41.0/ 9.4	0.250	19'-10 3/8"	5/16" x 6 x 3'-8 3/8" 1/4" x 6 x 19'-4 3/8"	3/8" x 6 x 17'-4 5/16"

FLANGE BRACE TABLE
FRAME LINE 2 3 4 5

∇ ID	# SIDES	MARK	BRACE DIST.	DETAIL	CLIP 1	CLIP 2
1	1	FB11	2'-0"	4-10	XFBP12	XFBP10
2	1	FB10	2'-0"	4-10	XFBP12	XFBP10
3	1	FB9	2'-0"	4-10	XFBP12	XFBP10
4	1	FB7	1'-0"	4-10	XFBP12	XFBP10
5	1	FB4	1'-0"	4-10	XFBP12	XFBP10
6	1	FB6	1'-0"	4-10	XFBP12	XFBP10
7	1	FB8	1'-0"	4-10	XFBP12	XFBP10
8	1	FB5	1'-0"	4-10	XFBP12	XFBP10
9	1	FB3	1'-0"	4-10	XFBP12	XFBP10



CROSS SECTION: FRAME LINE 2 3 4 5

TO BE USED FOR CONSTRUCTION

REFERENCE NOTES:
1. Snug Tight: Snug Tightened Joints are used. See General Information Snug Tight Sheet for bolt tightening information.
2. Storage: Fastener components shall be protected from dirt and moisture in closed containers at the site of installation. Only as many fastener components as are anticipated to be installed during the work shift shall be taken from protected storage. Fastener components that are not incorporated into the work shall be returned to protected storage at the end of the work shift.
3. Bolt and Nut Specifications: Bolts are high strength bolts conforming to ASTM F3125 Grade A325 or Grade A490. Nuts are high strength nuts conforming to ASTM A194 Grade 2 or 2H or ASTM A563 Grade C, D, or DH nut specifications. Substitution of mild steel bolts or nuts is not allowed and any field substitution will void the design warranty.
4. Eave Height: Eave height dimension is not always to the top of the eave strut. Due to thermal block situations, eave height dimension and top girt space dimension may be to the intersection of the top of the purlins. Refer to the eave details for more information.

REVISIONS
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(308) 389-4289 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE LEE

03/11/2025

Drawing	CROSS SECTION
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

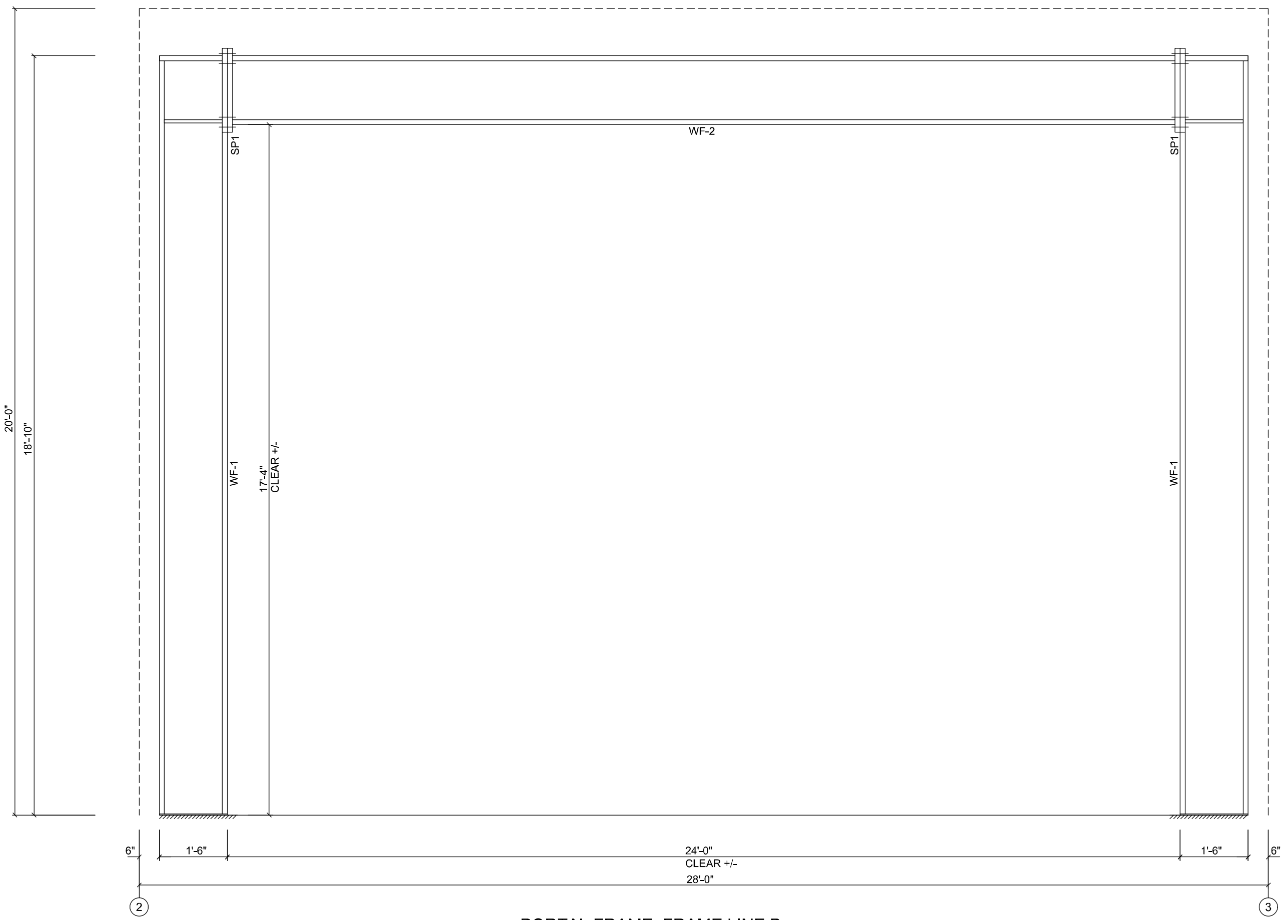
CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	CS1
KAL	DB	B3025326	CS2
2/10/25	2/27/25		

SPLICE BOLTS					
Splice Mark	Quan Top/	Bot	-----Bolt----- Type	Dia	Length
SP1	4	4	A325	5/8"	2"

MEMBER SIZE TABLE (in)

MARK	WEIGHT	LENGTH	WEB DEPTH START/END	WEB PLATE THICK	WEB PLATE LENGTH	OUTSIDE FLANGE T x W x LENGTH	INSIDE FLANGE T x W x LENGTH
WF-1	495	226.0	17.3/17.3	0.156	18'-10"	3/8" x 6 x 18'-10"	3/8" x 6 x 18'-10"
WF-2	546	288.0	17.5/17.5	0.125	24'-0"	1/4" x 8 x 24'-0"	1/4" x 8 x 24'-0"



PORTAL FRAME: FRAME LINE B

TO BE USED FOR CONSTRUCTION

REFERENCE NOTES:

1. Snug Tight: Snug Tightened Joints are used. See General Information Snug Tight Sheet for bolt tightening information.
2. Storage: Fastener components shall be protected from dirt and moisture in closed containers at the site of installation. Only as many fastener components as are anticipated to be installed during the work shift shall be taken from protected storage. Fastener components that are not incorporated into the work shall be returned to protected storage at the end of the work shift.
3. Bolt and Nut Specifications: Bolts are high strength bolts conforming to ASTM F3125 Grade A325 or Grade A490. Nuts are high strength nuts conforming to ASTM A194 Grade 2 or 2H or ASTM A563 Grade C, D, or DH nut specifications. Substitution of mild steel bolts or nuts is not allowed and any field substitution will void the design warranty.
4. Eave Height: Eave height dimension is not always to the top of the eave strut. Due to thermal block situations, eave height dimension and top girt space dimension may be to the intersection of the top of the purlins. Refer to the eave details for more information.

REVISIONS
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Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7289 cs@chiefind.com

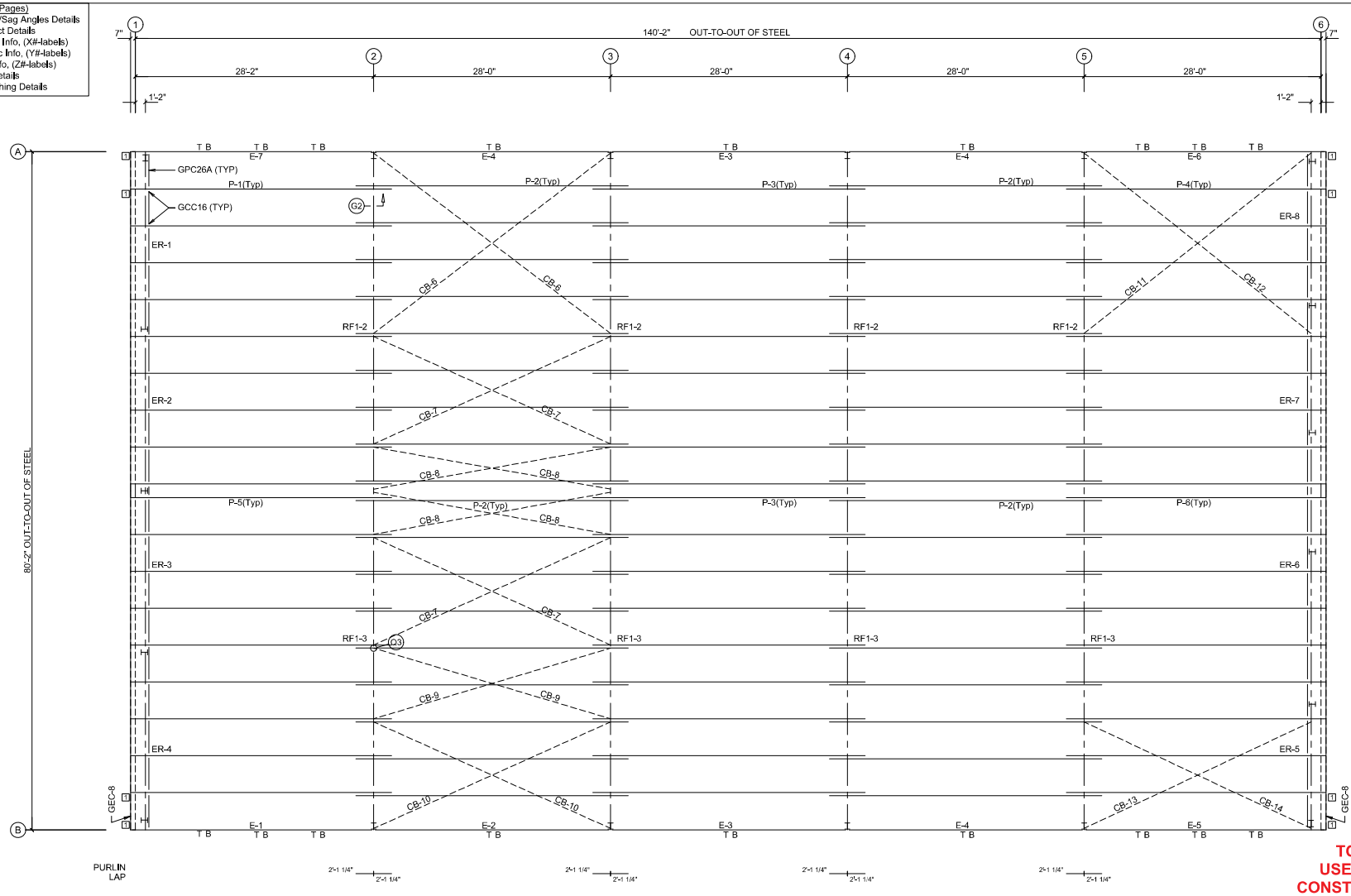
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. HOFF

03/11/2025

Drawing	CROSS SECTION
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	CS2
	KAL	DB	B3025326	CS2
	2/10/25	2/27/25		

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details



CONNECTION PLATES ROOF PLAN		
ID	QUAN	MARK/PART
1	8	XLGA1

TO BE USED FOR CONSTRUCTION

ROOF FRAMING PLAN

PURLIN DEPTH: 8.00

REFERENCE NOTES:
SAG ANGLE NOMENCLATURE
- "T" = TOP SAG ANGLE ROW.
- "B" = BOTTOM SAG ANGLE ROW.

REVISIONS	
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 044297 MICHELLE L. KAL

03/11/2025

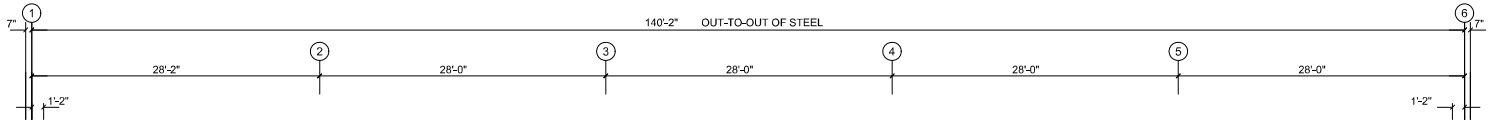
Drawing	ROOF FRAMING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

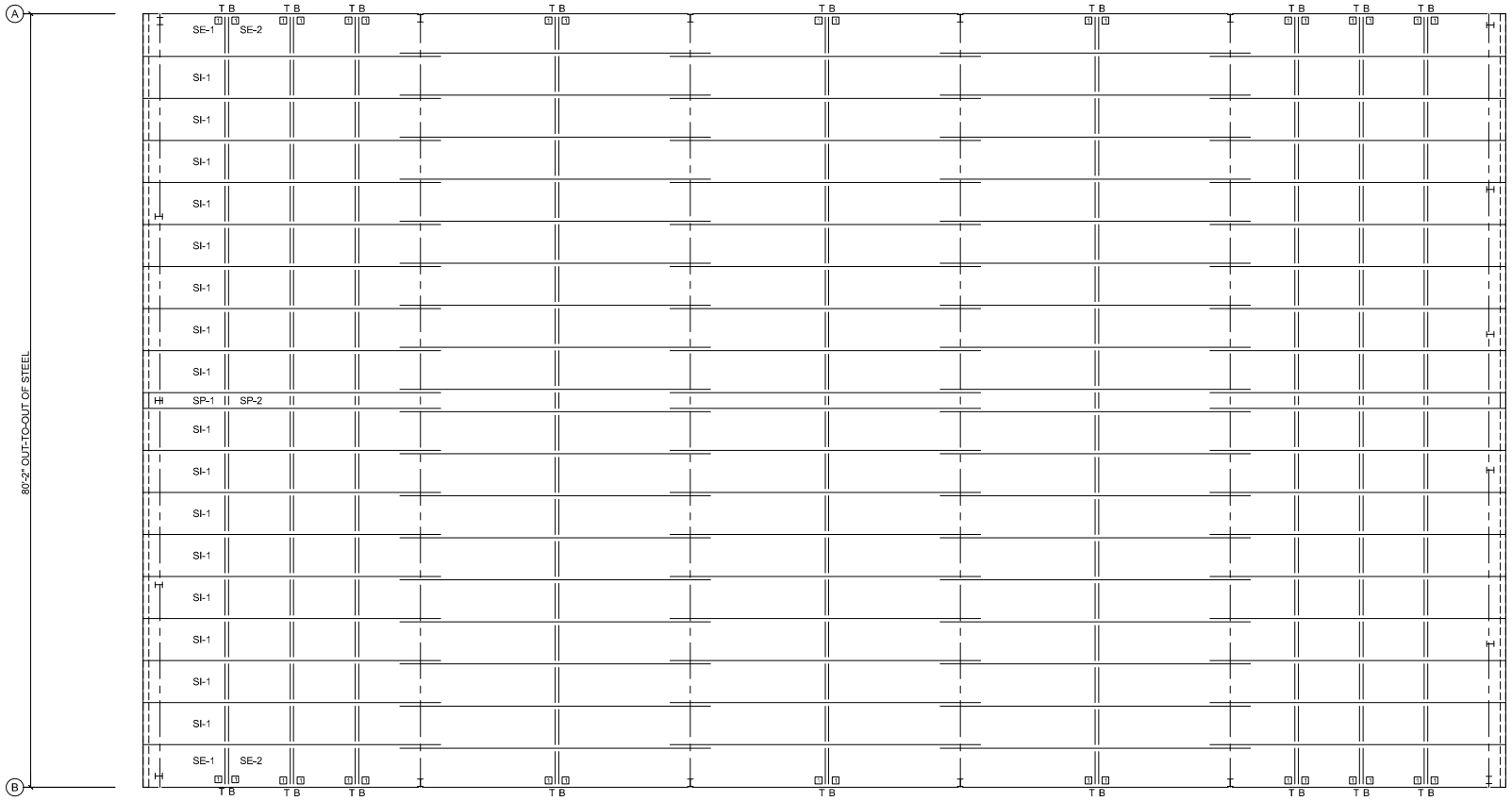
CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	RF1
BD/KAL	AL/DB	B3025326	RF3
2/10/25	3/6/25		

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details

CONNECTION PLATES		
☐ ID	QUAN	MARK/PART
1	36	XBC1





TO BE USED FOR CONSTRUCTION

PURLIN BRACING PLAN

PURLIN DEPTH: 8.00

REFERENCE NOTES:
SAG ANGLE NOMENCLATURE
- "T" = TOP SAG ANGLE ROW.
- "B" = BOTTOM SAG ANGLE ROW.

REVISIONS	
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NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

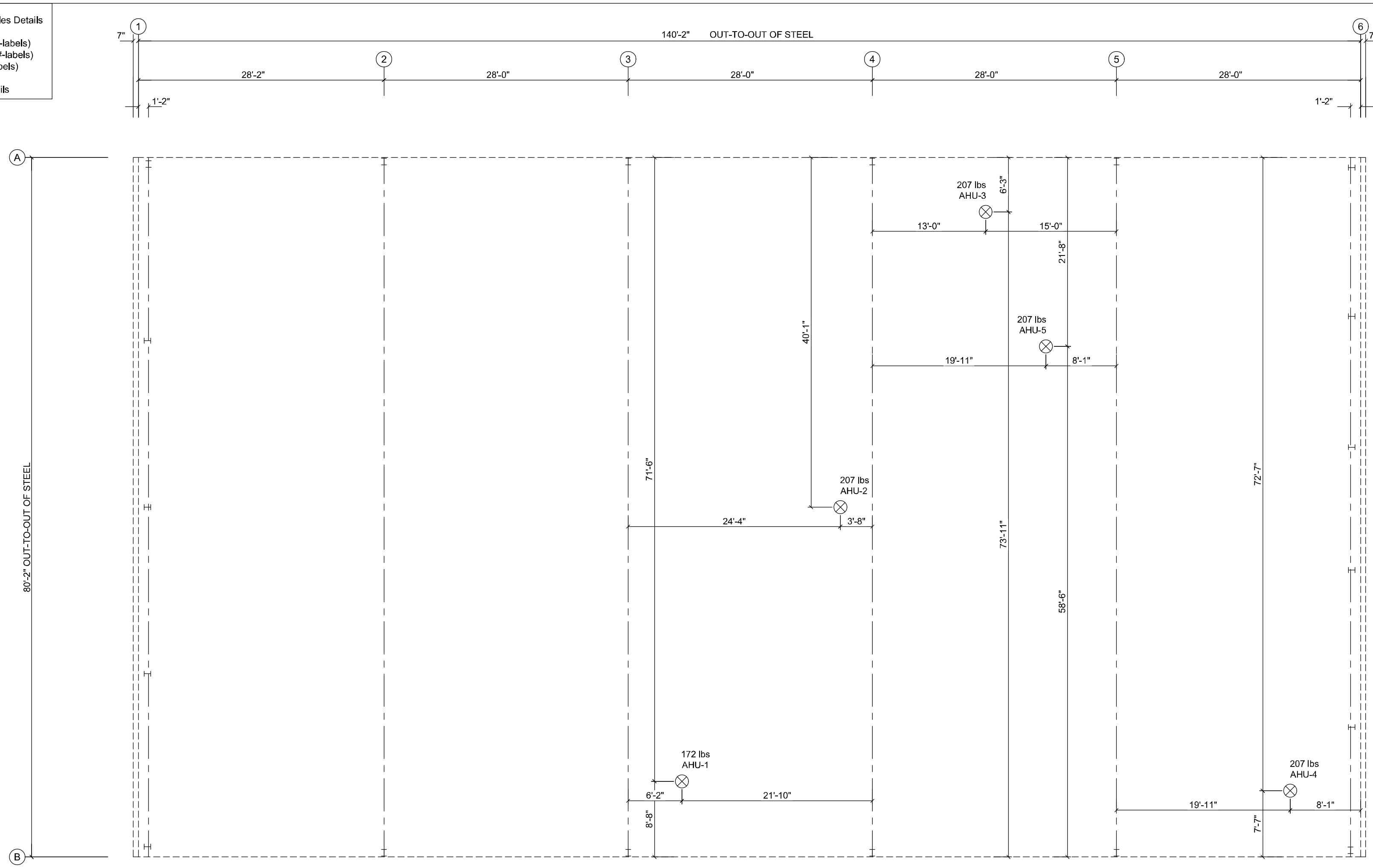
03/11/2025

Drawing	ROOF FRAMING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
BD	ALI	B3025326	RF2 / RF3
2/10/25	3/6/25		

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details



TO BE USED FOR CONSTRUCTION

ROOF SUSPENDED LOAD PLAN

REVISIONS	
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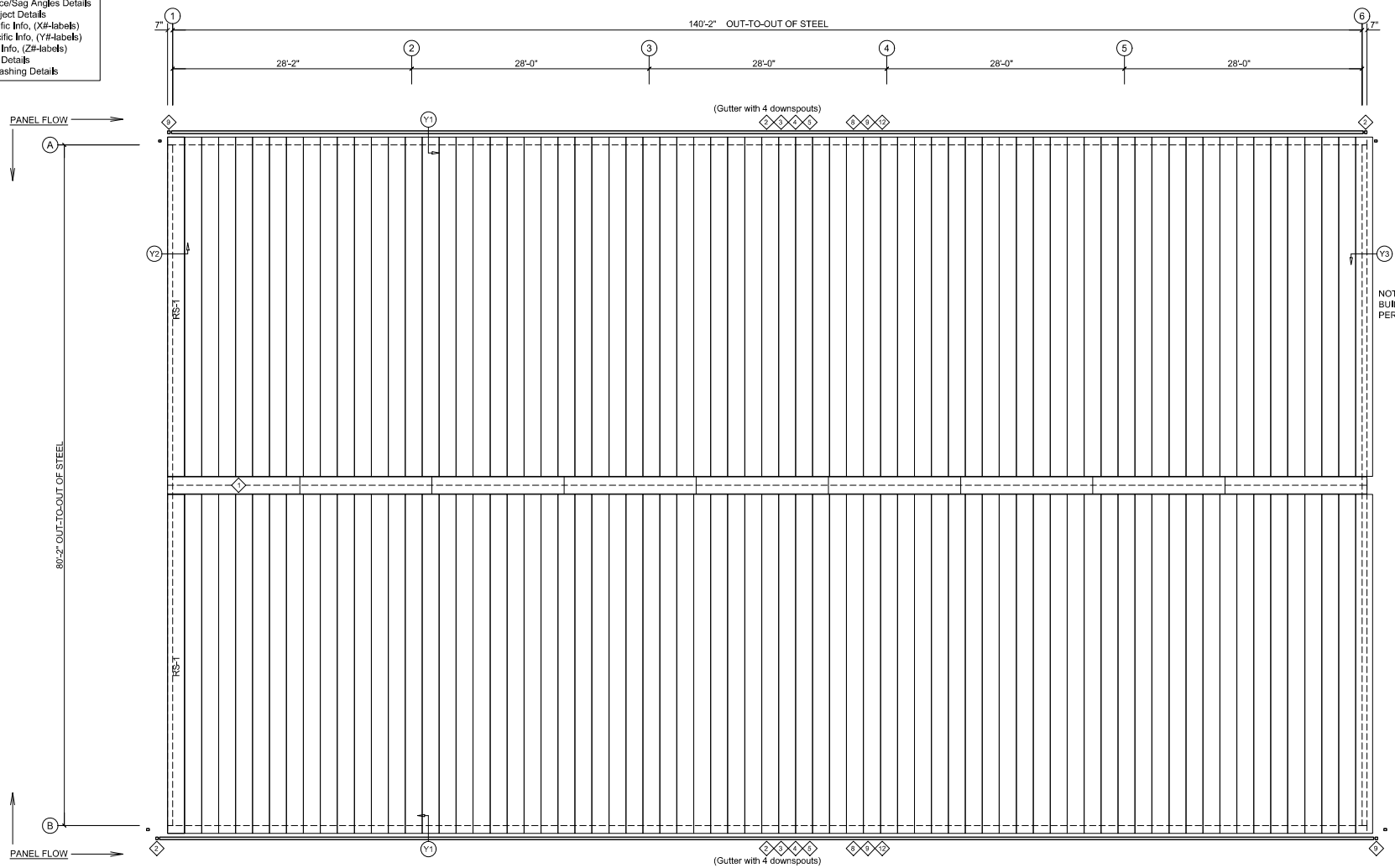
(308) 389-7289 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 MICHELLE L. ...
03/11/2025

Drawing	ROOF SUSPENDED LOAD PLAN
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	RF3
	BD/KAL	ALI	B3025326	RF3
	2/10/25	3/6/25		

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details



TRIM TABLE
ROOF PLAN

◇ID	QUAN.	PART	COLOR	LENGTH
1	9	RCL26A	GM	206"
2	4	ECLM26	AQ	9"
3	2	EGM26C	AQ	74"
4	16	EGM26A	AQ	206"
5	142	GSMA	GM	12 13/16"
8	2	GRS6	AQ	10"
9	4	ECRM26	AQ	9"
12	18	TCM6A	AQ	206"

PANEL TABLE
ROOF PLAN

QUAN	MARK	LENGTH
142	RS-1	492 3/4"

NOTE: SPT-1, FLAT STOCK SENT PER BUILDER REQUEST. FOR USE AROUND ROOF PERIMETER AS REQUIRED.

Reference Note:
Roof Panel system is based on the following

1) MSC High system (Clip offset = 1 3/8"; Bottom of roof panel to top of purlin)
2) A clip MUST beinstalled on ALL purlins unless noted otherwise.
3) (2) 1/4-14 x 1" fasteners per clip unless otherwise noted.
4) 1" Thermal Spacers

Roof panel modularity must be maintained during installation in order to assure coverage with the panels supplied.

ROOF PANEL PLAN

PANELS: 24 Ga. MSC - Galvalume (GM)

TO BE USED FOR CONSTRUCTION

REVISIONS	
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NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER

03/11/2025

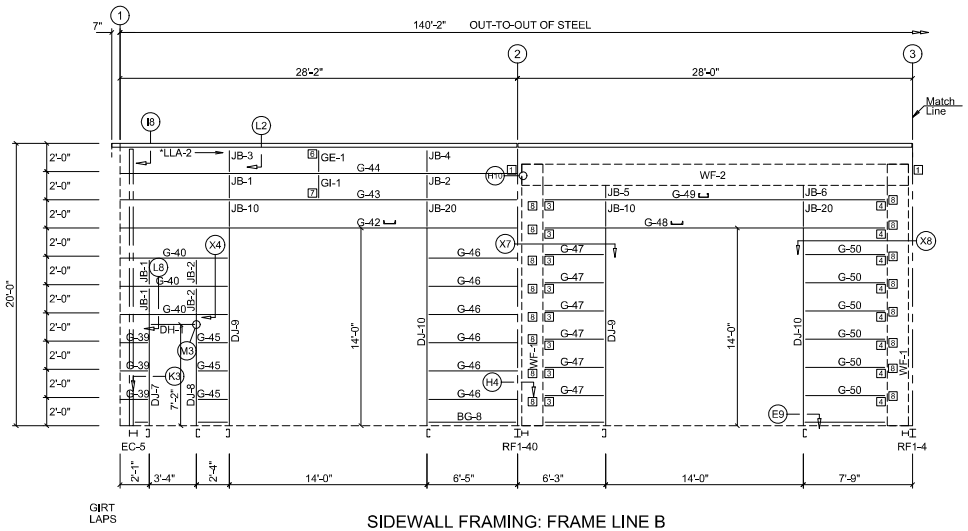
Drawing	ROOF PANEL
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

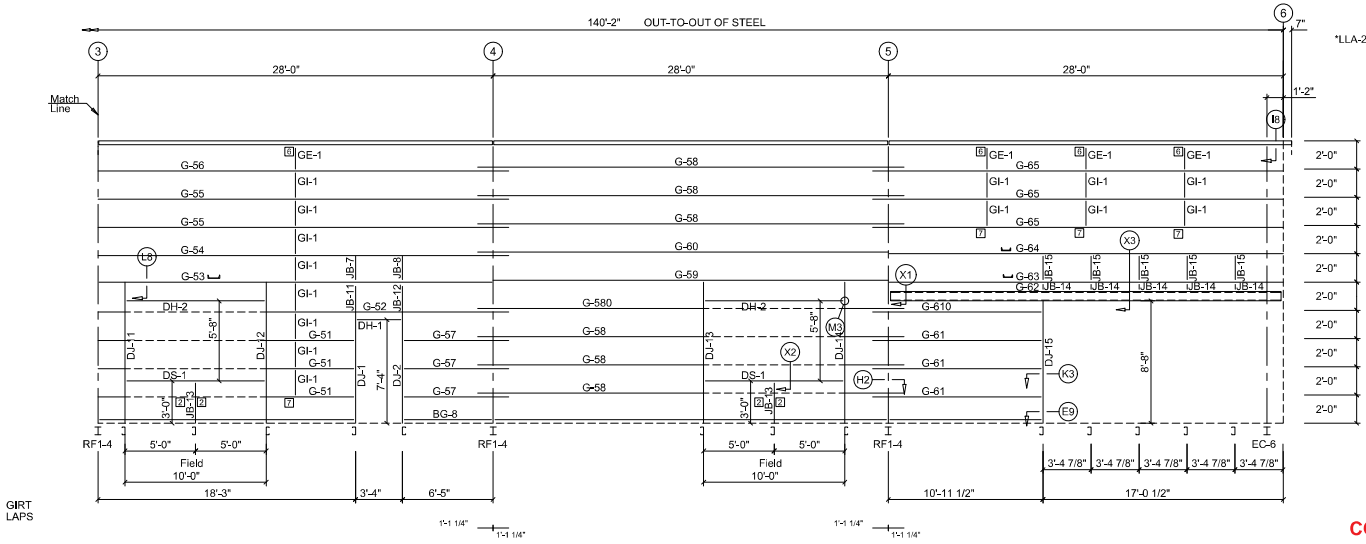
DRAWN	CHECK	ORDER NO.	RP1
BD	ALI	B3025326	RP1
2/10/25	3/6/25		

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details

CONNECTION PLATES FRAME LINE B		
ID	QUAN	MARK/PART
1	2	XBC102
2	4	XBC84
3	8	XGCA7
4	8	XGCA8
6	5	XBC65
7	5	XBC1
8	16	XGA36



SIDEWALL FRAMING: FRAME LINE B



SIDEWALL FRAMING: FRAME LINE B

TO BE USED FOR CONSTRUCTION

GIRT DEPTH: 8.00

REVISIONS	
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 044297 MICHELLE L. KAL

03/11/2025

Drawing	SIDEWALL DRAWING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

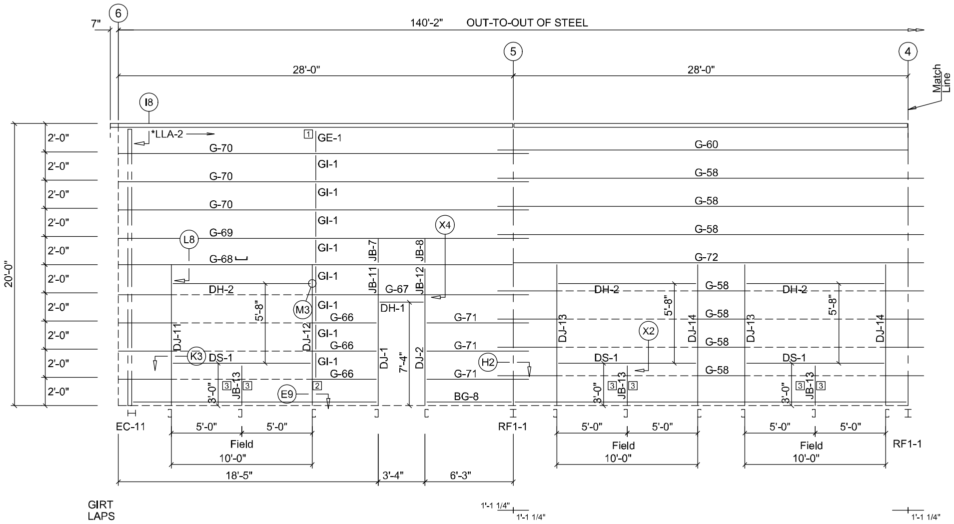
DRAWN	CHECK	ORDER NO.	
BD/KAL	AL/DB	B3025326	S1
2/10/25	3/6/25		S4

Details Order (D# Pages)

- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details

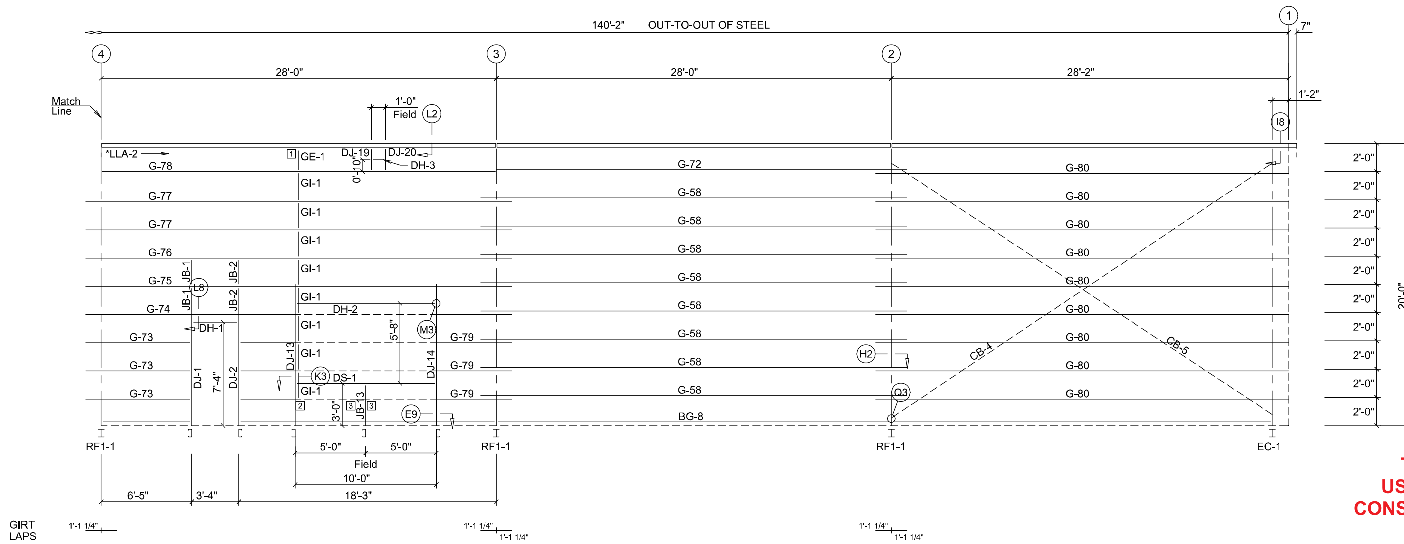
CONNECTION PLATES
FRAME LINE A

☐ID	QUAN	MARK/PART
1	2	XBC65
2	2	XBC1
3	8	XBC84



*LLA-2 IS USED FOR INSULATION SUPPORT.

SIDEWALL FRAMING: FRAME LINE A



TO BE USED FOR CONSTRUCTION

SIDEWALL FRAMING: FRAME LINE A

GIRT DEPTH: 8.00

REVISIONS

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NORTH CAROLINA PROFESSIONAL SEAL 044297 MICHELLE L. H...
03/11/2025

Drawing	SIDEWALL DRAWING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	S2
BD/KAL	ALI/DB	B3025326	S4
2/10/25	3/6/25		

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
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- Steel Specific Info, (X#-labels)
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- Mezzanine Info, (Z#-labels)
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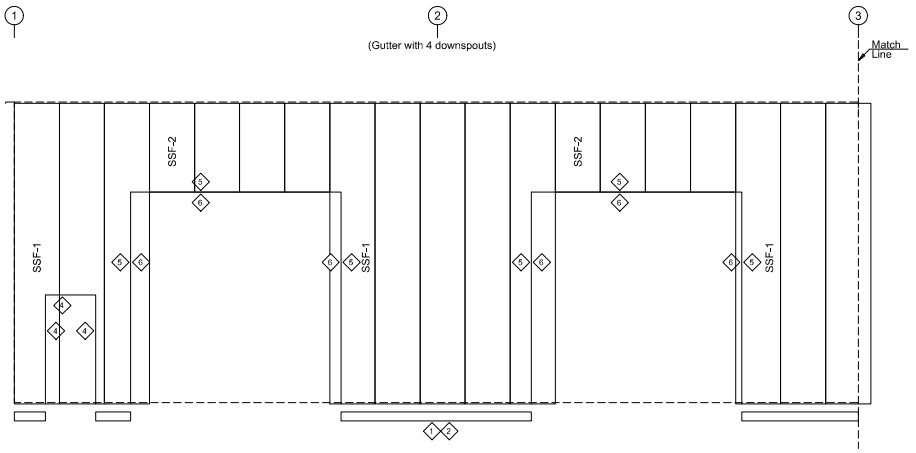
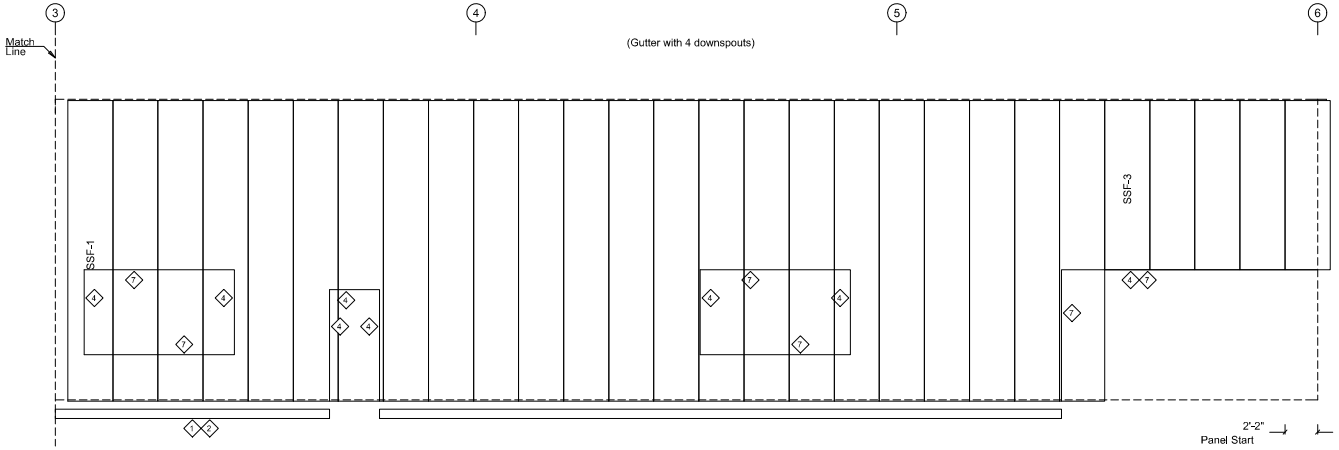
- Opening Flashing Details



SIDEWALL PANEL & TRIM: FRAME LINE B

PANELS: 24 Ga. AP - Galvalume (GM)



TRIM TABLE
LINE: B

QID	QUAN.	MARK	COLOR	LENGTH
1	2	BTN6B	GM	146"
2	4	BTN6A	GM	206"
4	11	JT6C	AQ	90"
5	6	DT86A	AQ	206"
6	6	JT6A	AQ	206"
7	6	JT6B	AQ	146"

PANEL TABLE
FRAME LINE B

QUAN	MARK	LENGTH
34	SSF-1	240"
8	SSF-2	71"
5	SSF-3	135"

TO BE USED FOR CONSTRUCTION

SIDEWALL PANEL & TRIM: FRAME LINE B

PANELS: 24 Ga. AP - Galvalume (GM)

NOTE: Building " A ", Column Line " B "
(STANDARD GUTTER) (SINGLE DOWNSPOUT DROP)
(4) Downspout drops provided for this wall
Each drop consists of:
(2) 12'-0" Downspout(s) (1) "A" Elbow(s)

NOTE: Using standard gutter and downspouts, locate downspouts at a spacing not to exceed 59.4 ft with first downspout within 29.7 ft from ends of gutter. This spacing is based on rainfall intensity of 6.5 inches per hour and MBMA Metal Building Systems Manual Appendix A4.2.

GENERAL NOTES:
1. All trims to receive a 2" lap unless otherwise noted.

REVISIONS

Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

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(308) 389-7269 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 044297 MICHELLE L. [illegible]

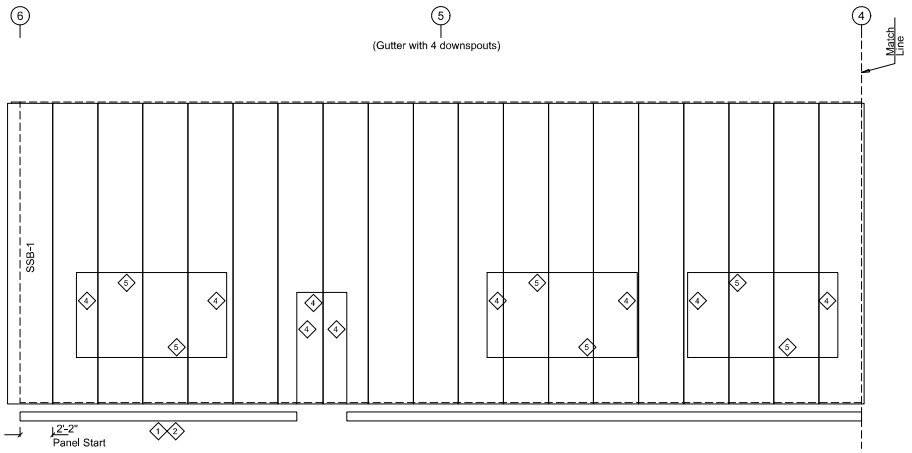
03/11/2025

Drawing	SIDEWALL DRAWING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
BD	ALI	B3025326	S3
2/10/25	3/6/25		S4

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details



TRIM TABLE
LINE: A

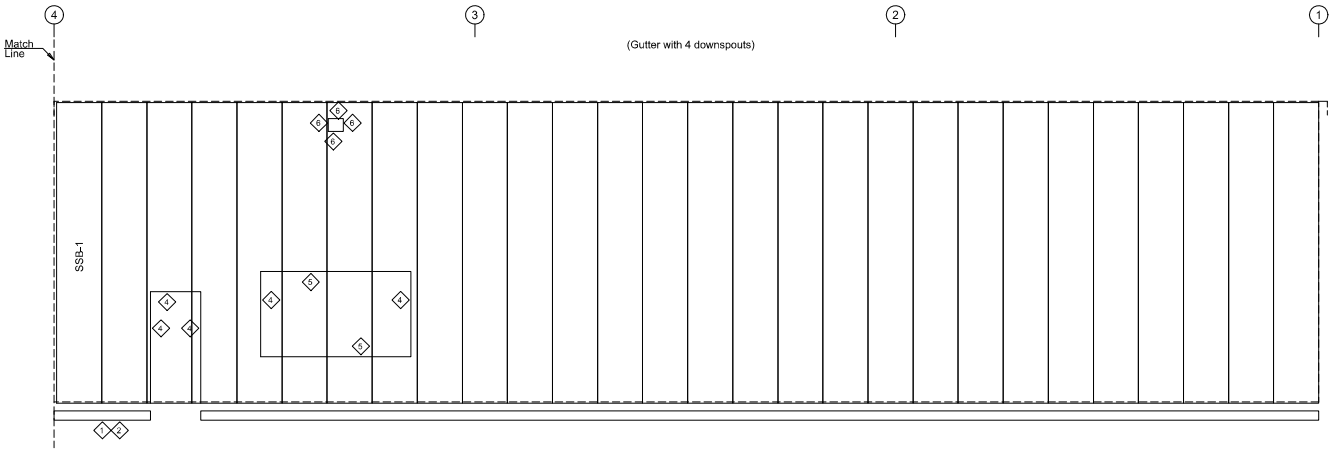
ID	QUAN.	MARK	COLOR	LENGTH
1	4	BTN6B	GM	146"
2	6	BTN6A	GM	206"
4	14	JT6C	AQ	90"
5	8	JT6B	AQ	146"
6	4	JT6D	AQ	42"

PANEL TABLE
FRAME LINE A

QUAN	MARK	LENGTH
47	SSB-1	240"

SIDEWALL PANEL & TRIM: FRAME LINE A

PANELS: 24 Ga. AP - Galvalume (GM)



TO BE USED FOR CONSTRUCTION

SIDEWALL PANEL & TRIM: FRAME LINE A

PANELS: 24 Ga. AP - Galvalume (GM)

NOTE: Building " A ", Column Line " A "
(STANDARD GUTTER) (SINGLE DOWNSPOUT DROP)
(4) Downspout drops provided for this wall
Each drop consists of:
(2) 12'-0" Downspout(s) (1) "A" Elbow(s)

NOTE: Using standard gutter and downspouts, locate downspouts at a spacing not to exceed 59.4 ft with first downspout within 29.7 ft from ends of gutter. This spacing is based on rainfall intensity of 6.5 inches per hour and MBMA Metal Building Systems Manual Appendix A4.2.

GENERAL NOTES:
1. All trims to receive a 2" lap unless otherwise noted.

REVISIONS	
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(308) 389-7269 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

Drawing	SIDEWALL DRAWING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
BD	ALI	B3025326	S4
2/10/25	3/6/25		S4

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details

FLANGE BRACE TABLE
FRAME LINE 1

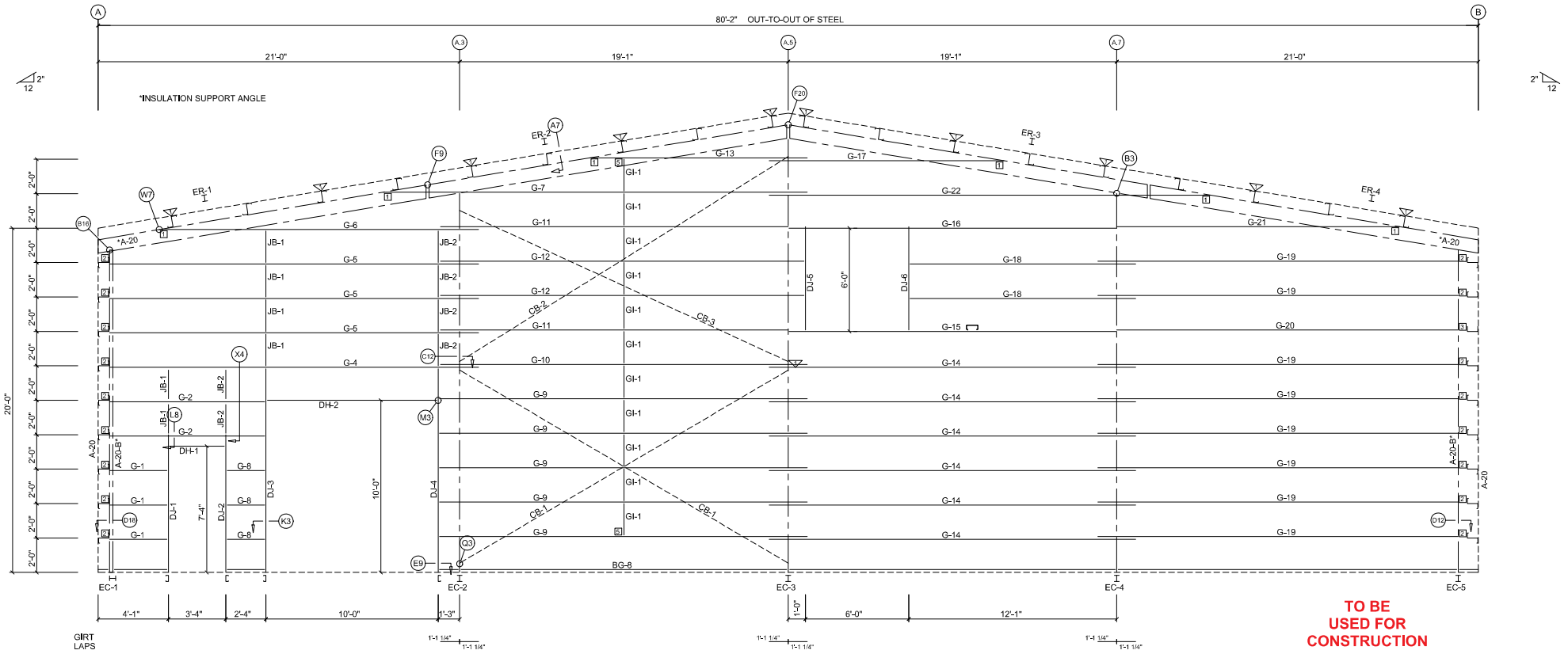
▽ ID	# SIDES	MARK	BRACE DIST.	DETAIL	CLIP 1	CLIP 2	PART
1	1	FB2	1'-0"	4-10	XFBP12	XFBP10	L15151/8

BOLT TABLE
FRAME LINE 1

LOCATION	QUAN	TYPE	DIA	LENGTH
ER-1/ER-2	8	A325	5/8"	2"
ER-2/ER-3	6	A325	5/8"	2"
ER-3/ER-4	8	A325	5/8"	2"
Columns/Raf	4	A325	1/2"	1 1/4"

CONNECTION PLATES
FRAME LINE 1

☐ID	QUAN	MARK/PART
1	6	XBC87
2	17	XBC38
3	1	PL-1
5	2	XBC1



TO BE USED FOR CONSTRUCTION

ENDWALL FRAMING: FRAME LINE 1

GIRT DEPTH: 8.00

REVISIONS	
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NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. KAY

03/11/2025

Drawing	ENDWALL DRAWING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
BD/KAL	AL/DB	B3025326	E1
2/10/25	3/6/25		E4

Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details

FLANGE BRACE TABLE
FRAME LINE 6

▽ ID	# SIDES	MARK	BRACE DIST.	DETAIL	CLIP 1	CLIP 2	PART
1	1	FB1	1'-0"	4-10	XFBP12	XFBP10	L15151/8
2	1	FB2	1'-0"	4-10	XFBP12	XFBP10	L15151/8

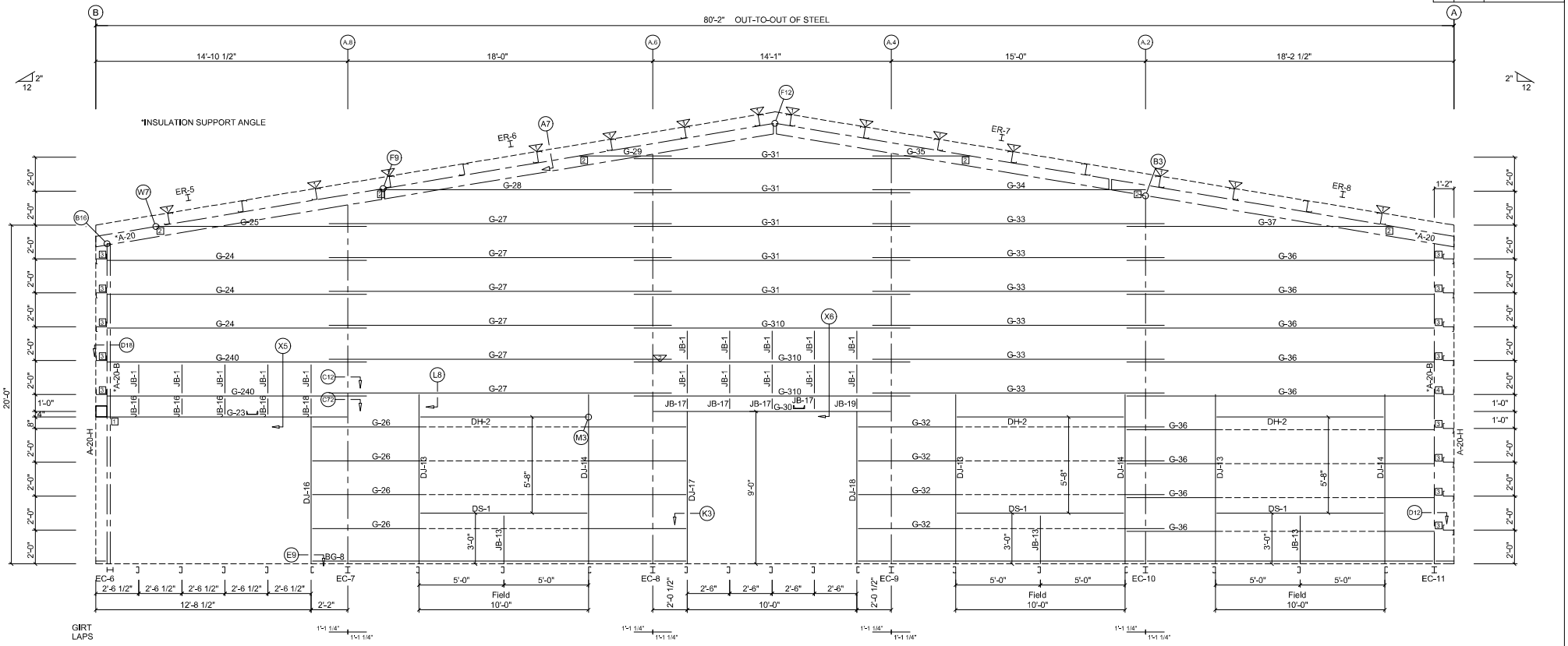
BOLT TABLE
FRAME LINE 6

LOCATION	QUAN	TYPE	DIA	LENGTH
ER-5/ER-6	8	A325	5/8"	2"
ER-6/ER-7	8	A325	5/8"	2"
ER-7/ER-8	8	A325	5/8"	2"
Columns/Raf	4	A325	1/2"	1 1/4"

CONNECTION PLATES
FRAME LINE 6

☐ID	QUAN	MARK/PART
1	1	PL51
2	6	XBC87
3	13	XBC38
4	1	PL-1

TO BE USED FOR CONSTRUCTION



ENDWALL FRAMING: FRAME LINE 6

GIRT DEPTH: 8.00

REVISIONS	
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NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]
03/11/2025

Drawing	ENDWALL DRAWING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
BD	AL/DB	B3025326	E2
2/10/25	3/6/25		E4

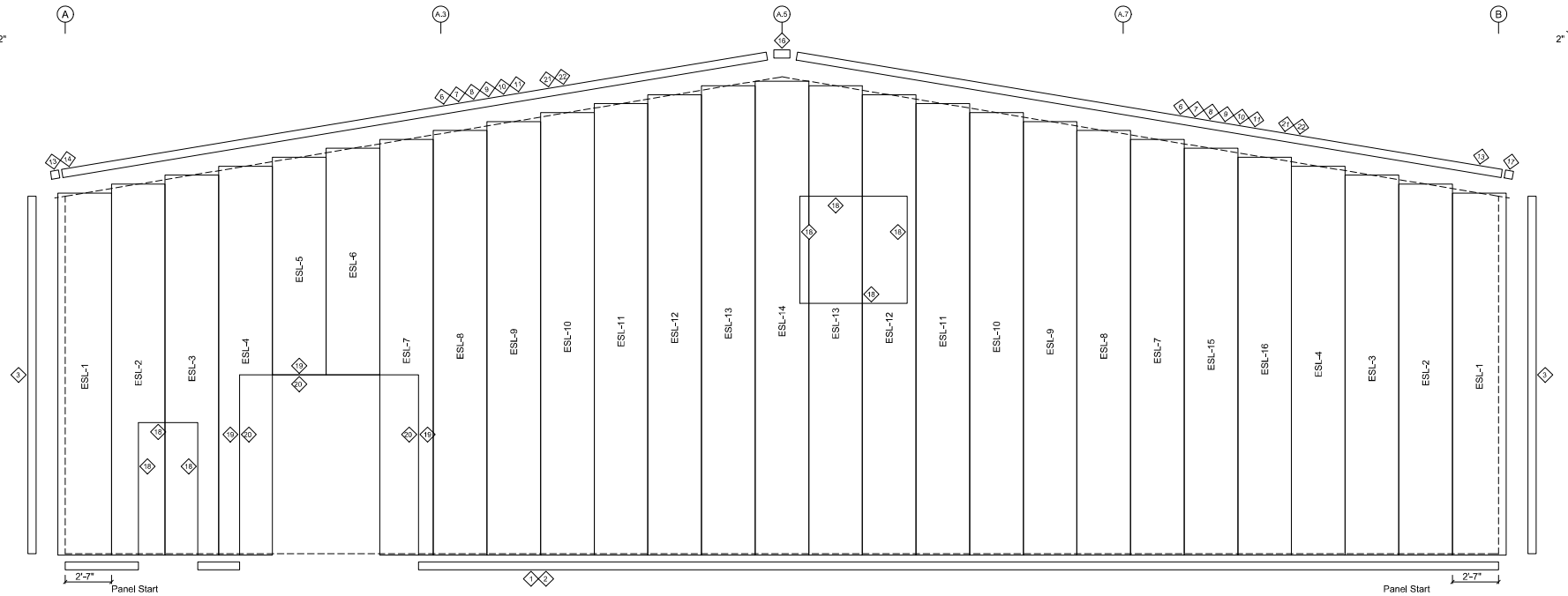
Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details

PANEL TABLE
FRAME LINE 1

QUAN	MARK	LENGTH
2	ESL-1	243 3/16"
2	ESL-2	249 3/16"
2	ESL-3	255 3/16"
2	ESL-4	261 3/16"
1	ESL-5	146 3/16"
1	ESL-6	152 3/16"
2	ESL-7	279 3/16"
2	ESL-8	285 3/16"
2	ESL-9	291 3/16"
2	ESL-10	297 3/16"
2	ESL-11	303 3/16"
2	ESL-12	309 3/16"
2	ESL-13	315 3/16"
1	ESL-14	318 3/16"
1	ESL-15	273 3/16"
1	ESL-16	267 3/16"

TRIM TABLE
LINE: 1

QID	QUAN.	MARK	COLOR	LENGTH
1	3	BTN6B	GM	146"
2	3	BTN6A	GM	206"
3	4	CTA6B	GM	146"
6	6	SCT6A	GM	206"
7	2	GTMC6B	AQ	146"
8	4	GTMC6A	AQ	206"
9	14	GTS6A	AQ	30"
10	2	GET6B	AQ	146"
11	4	GET6A	AQ	206"
13	2	GCTMC6	AQ	11 1/16"
14	1	TPLMC6	AQ	11"
16	1	GRTMC6	AQ	20 3/16"
17	1	TPRMC6	AQ	11"
18	7	JT6C	AQ	90"
19	3	DT86B	AQ	146"
20	3	JT6B	AQ	146"
21	4	EF6A	AQ	206"
22	2	EF6B	AQ	146"



TO BE USED FOR CONSTRUCTION

ENDWALL PANEL & TRIM: FRAME LINE 1

PANELS: 24 Ga. AP - Galvalume (GM)

GENERAL NOTES:
1. All trims to receive a 2" lap unless otherwise noted.

REVISIONS	
4	
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Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7289 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER

03/11/2025

Drawing	ENDWALL DRAWING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
BD	ALI	B3025326	E3
2/10/25	3/6/25		E4

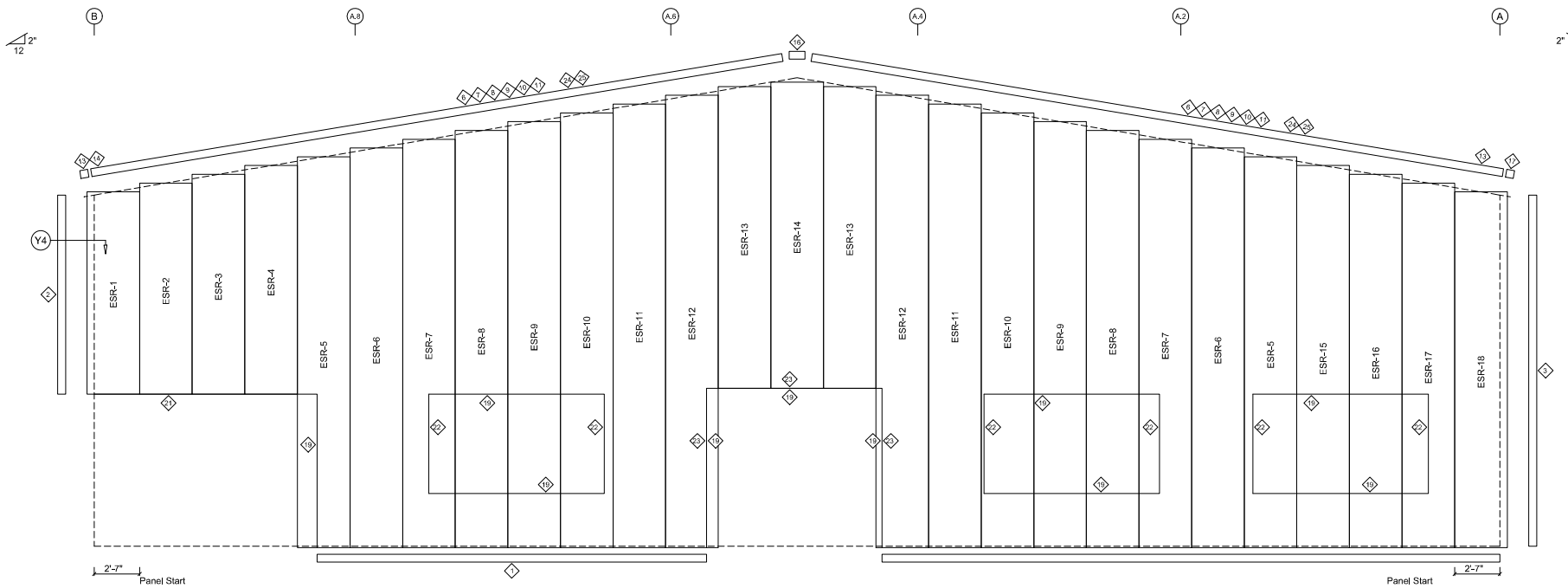
Details Order (D# Pages)
- Flange Brace/Sag Angles Details
- Typical Project Details
- Steel Specific Info, (X#-labels)
- Panel Specific Info, (Y#-labels)
- Mezzanine Info, (Z#-labels)
- Panel/Trim Details
- Opening Flashing Details

PANEL TABLE
FRAME LINE 6

QUAN	MARK	LENGTH
1	ESR-1	138 3/16"
1	ESR-2	144 3/16"
1	ESR-3	150 3/16"
1	ESR-4	156 3/16"
2	ESR-5	267 3/16"
2	ESR-6	273 3/16"
2	ESR-7	279 3/16"
2	ESR-8	285 3/16"
2	ESR-9	291 3/16"
2	ESR-10	297 3/16"
2	ESR-11	303 3/16"
2	ESR-12	309 3/16"
2	ESR-13	206 3/16"
1	ESR-14	209 3/16"
1	ESR-15	261 3/16"
1	ESR-16	255 3/16"
1	ESR-17	249 3/16"
1	ESR-18	243 3/16"

TRIM TABLE
LINE: 6

QID	QUAN.	MARK	COLOR	LENGTH
1	5	BTN6B	GM	146"
2	1	SPT-2	GM	146"
3	2	SPT-2	GM	146"
6	6	SCT6A	GM	206"
7	2	GTMC6B	AQ	146"
8	4	GTMC6A	AQ	206"
9	14	GTS6A	AQ	30"
10	2	GET6B	AQ	146"
11	4	GET6A	AQ	206"
13	2	GCTMC6	AQ	11 1/16"
14	1	TPLMC6	AQ	11"
16	1	GRTMC6	AQ	20 3/16"
17	1	TPRMC6	AQ	11"
19	10	JT6B	AQ	146"
21	1	JT6A	AQ	206"
22	6	JT6C	AQ	90"
23	3	DT6B	AQ	146"
24	4	EF6A	AQ	206"
25	2	EF6B	AQ	146"



TO BE USED FOR CONSTRUCTION

ENDWALL PANEL & TRIM: FRAME LINE 6

PANELS: 24 Ga. AP - Galvalume (GM)

GENERAL NOTES:
1. All trims to receive a 2" lap unless otherwise noted.

REVISIONS	
4	
3	
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NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

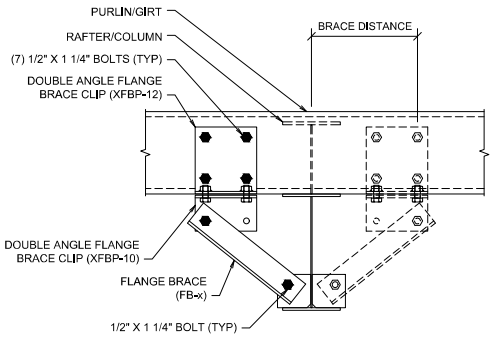
03/11/2025

Drawing	ENDWALL DRAWING
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

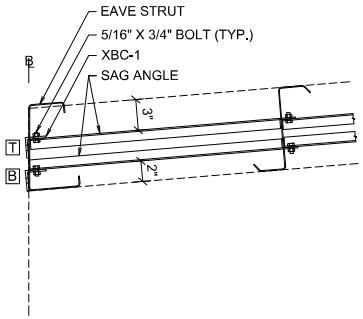
DRAWN	CHECK	ORDER NO.	
BD	ALI	B3025326	E4
2/10/25	3/6/25		E4

NOTE:
- Fill all holes in the flange brace with bolts.
- If flange brace connection occurs within the purlin lap, install flange brace before tightening purlin bolts.
- Flange brace may be one side only. For location and number of sides refer to Cross Sections, Endwall and Sidewall drawings.



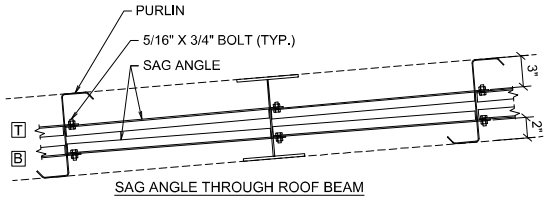
FLANGE BRACE "4-10 CONNECTION"

T= Top Row Sag Angle
B= Bottom Row Sag Angle
See Roof Framing Plans for Locations

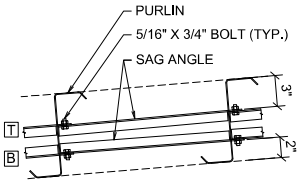


LOW SIDE EAVE STRUT SAG ANGLE STANDING SEAM ROOF

T= Top Row Sag Angle
B= Bottom Row Sag Angle
See Roof Framing Plans for Locations



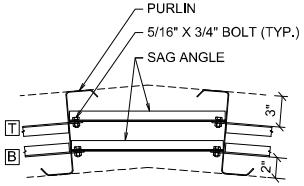
SAG ANGLE THROUGH ROOF BEAM



MID ROOF

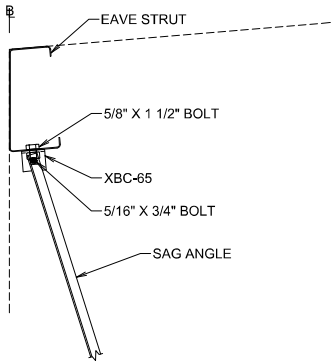
INTERMEDIATE SAG ANGLE STANDING SEAM ROOF

T= Top Row Sag Angle
B= Bottom Row Sag Angle
See Roof Framing Plans for Locations



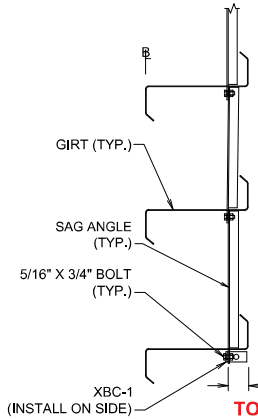
RIDGE SAG ANGLE STANDING SEAM ROOF

NOTE : Girt sag angles are to be located toward "INSIDE" of building.



SIDEWALL SAG ANGLE AT LOW SIDE (High Side Sag Angle Connections typical)

NOTE : Girt sag angles are to be located toward "INSIDE" of building.



TO BE USED FOR CONSTRUCTION

INTERMEDIATE SAG ANGLE

REVISIONS
4
3
2
1

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PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7269 cs@chiefmfd.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

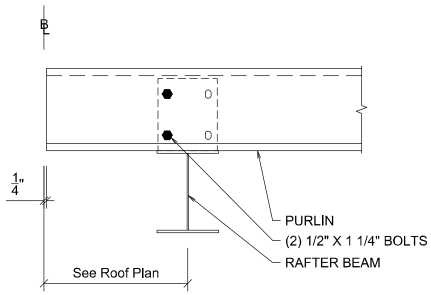
03/11/2025

Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

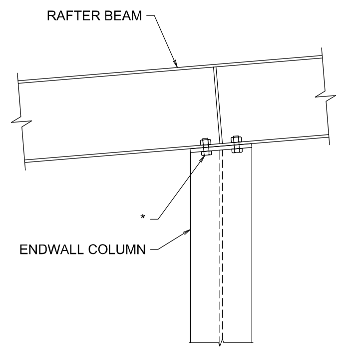
CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D1 / D13
2/11/25	3/6/25		

NOTE: The "Standard" bolting requirements for a purlin to clip is shown below. See the Special Bolts Roof Plan table on the Roof Framing Plan for additional bolts. The (#) symbol will reference additional bolts, if required.

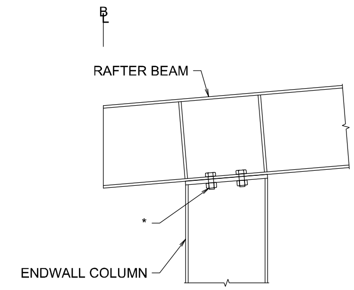


A7 SECTION THRU ENDWALL RAFTER



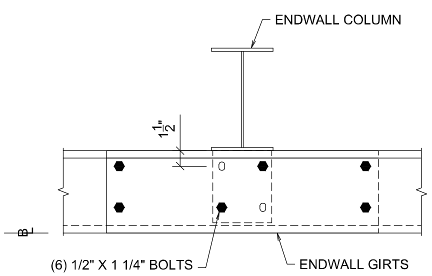
* Refer to Bolt Table on Endwall drawing for bolting information.

B3 RAFTER BEAM TO COLUMN



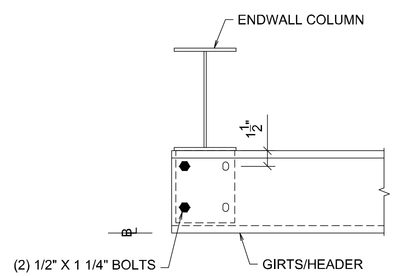
* Refer to Bolt Table on Endwall Drawing for bolt information.

B16 ROTATED CORNER COLUMN TO RAFTER BEAM



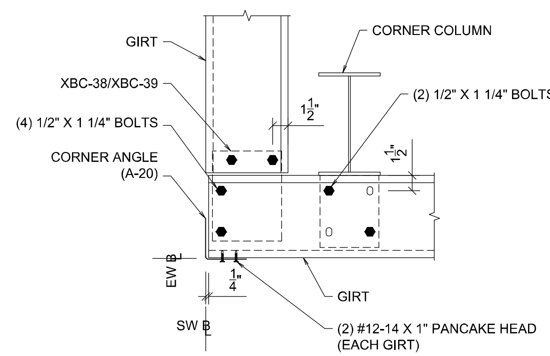
NOTE:
- Flange Brace are not shown. Refer to Endwall drawings for Flange Brace locations and number of sides.

C12 WALL GIRT TO WIDE FLANGE ENDWALL COLUMN



NOTE: Flange Braces are not shown. Refer to Endwall drawings for Flange Brace locations and number of sides.

C72 ENDWALL COLUMN TO WALL GIRT



TO BE USED FOR CONSTRUCTION

D12 CORNER COLUMN TO WALL GIRT

REVISIONS	
4	
3	
2	
1	

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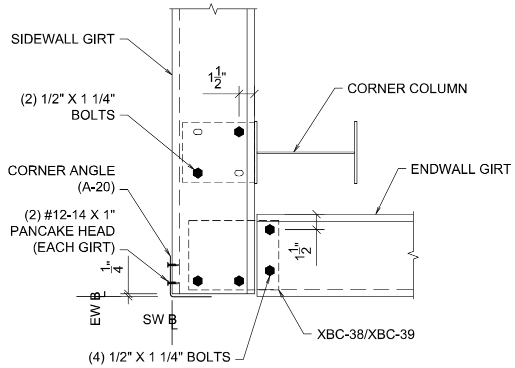
03/11/2025

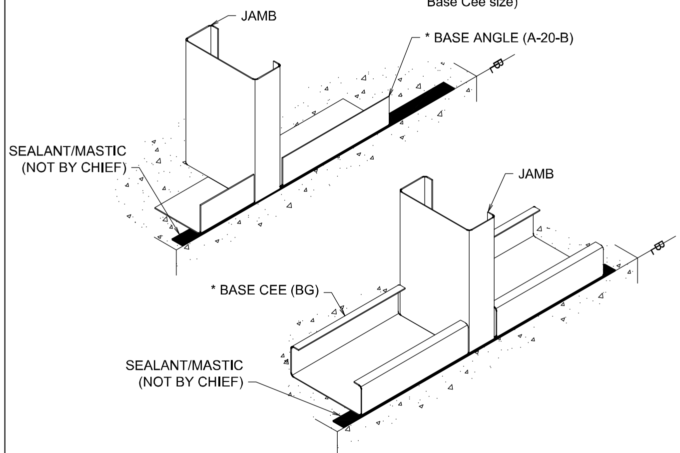
Drawing	DETAILS			
Buyer	Triangle Home Pros, LLC			
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526			
Project Name	E & M Concrete			
CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	D2
	KAL/BD	ALI/DB	B3025326	D13
	2/11/25	3/6/25		



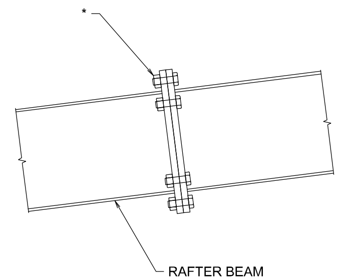
D18 CORNER COLUMN TO WALL GIRT

NOTE: See Anchor Rod Plan for connection of jamb and base members.

* Field cut base member at jambs. (Refer to the wall framing drawings for Base Cee size)

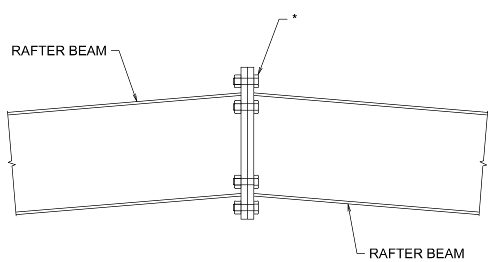


E9 BASE MEMBER



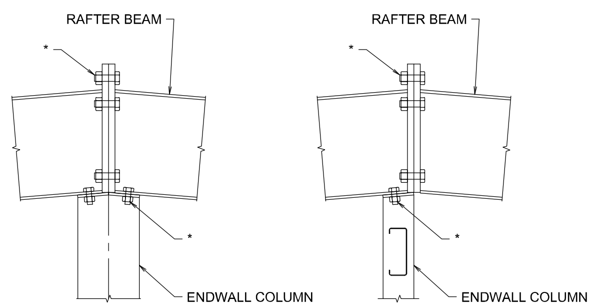
* Refer to Bolt Table on Endwall drawing for bolting information.

F9 RAFTER BEAM SPLICE



* Refer to Bolt Table on Endwall drawing for bolting information.

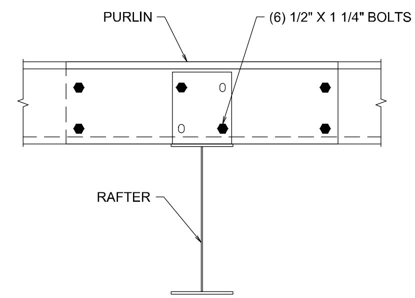
F12 RAFTER BEAM CONNECTION AT RIDGE



* Refer to Bolt Table on Endwall drawing for bolting information.

F20 RAFTER BEAM SPLICE

NOTE: The "Standard" bolting requirements for a purlin to clip is shown below. See the Special Bolts Roof Plan table on the Roof Framing Plan for additional bolts. The (#) symbol will reference additional bolts, if required.



TO BE USED FOR CONSTRUCTION

G2 ROOF PURLIN TO INTERIOR FRAME RAFTER

REVISIONS
4
3
2
1

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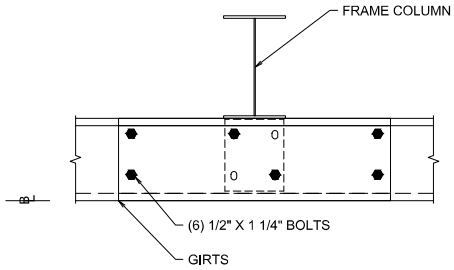
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7289 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 MICHELLE L. HILL
03/11/2025

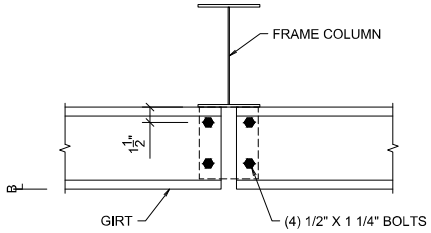
Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	D3
	KAL/BD	ALI/DB	B3025326	
	2/11/25	3/6/25		D13



NOTE:
Flange Braces are not shown. Refer to Cross Section, Endwall, or Sidewall drawings for Flange Brace locations and number of sides.

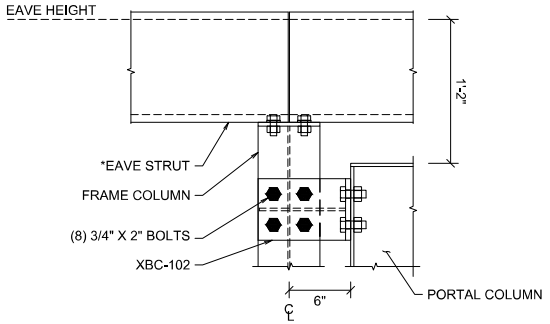
H2 WALL GIRT TO FRAME COLUMN



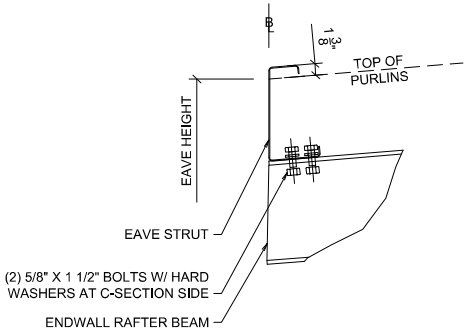
NOTE:
Flange Brace are not shown. Refer to Cross Section or Sidewall drawings for Flange Brace locations and number of sides.

H4 WALL GIRT TO FRAME COLUMN

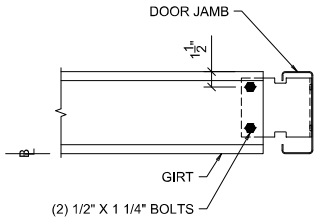
* SEE ADDITIONAL DETAILS FOR EAVE STRUT CONNECTION



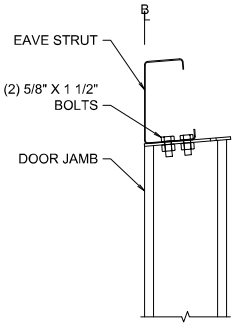
H10 PORTAL FRAME TO FRAME COLUMN
8" OUTSET / BYPASS GIRTS



I8 EAVE STRUT TO ENDWALL RAFTER BEAM
STANDING SEAM ROOF



K3 WALL GIRT TO DOOR JAMB



TO BE USED FOR CONSTRUCTION

L2 DOOR JAMB TO LOW EAVE STRUT

REVISIONS	
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(308) 389-7269 cs@chiefmfd.com

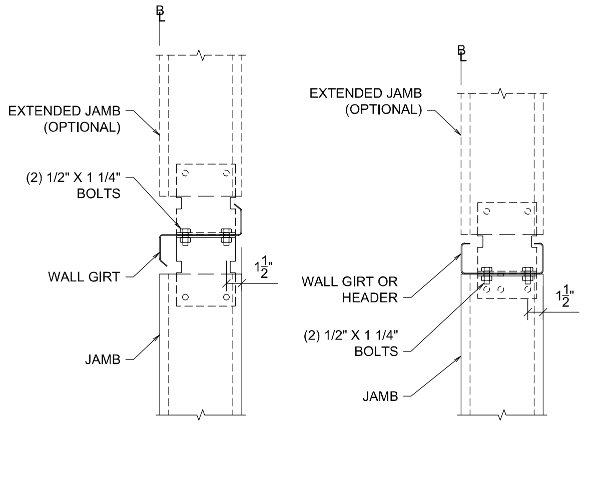
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

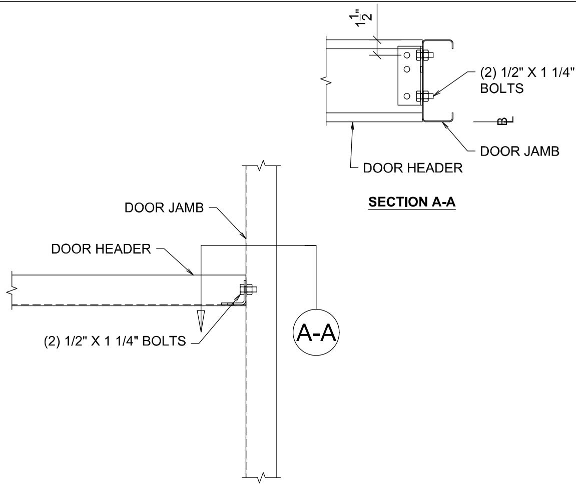
Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D4 / D13
2/11/25	3/6/25		



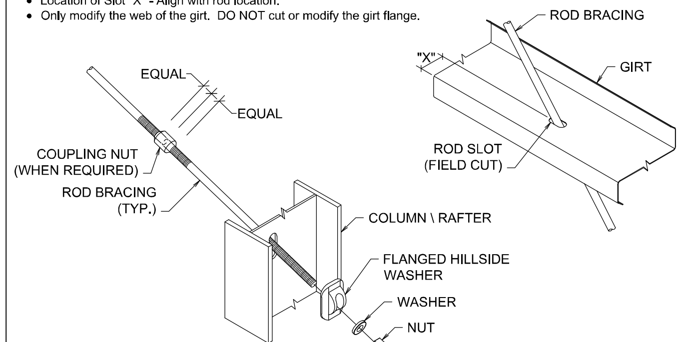
L8 JAMB TO WALL GIRT OR HEADER



M3 DOOR HEADER TO DOOR JAMB (Window Sill Typical)

Rod Braces that falls within the Girt Web, the Erector is to cut a slot for the passage of the Rod Brace. ZEE girt shown; Hot Rolled or Wide Flange typical.

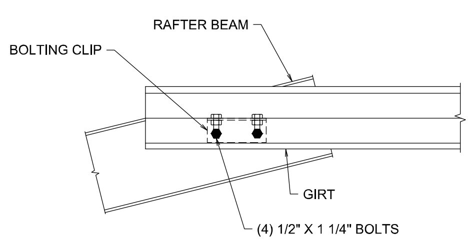
- Width of Slot - Minimum = rod diameter + 1/16", Maximum = 1.5 times rod diameter.
- Length of Slot - As needed based on slope of rod and location of girts to allow rod to pass through girt.
- Location of Slot "X" - Align with rod location.
- Only modify the web of the girt. DO NOT cut or modify the girt flange.



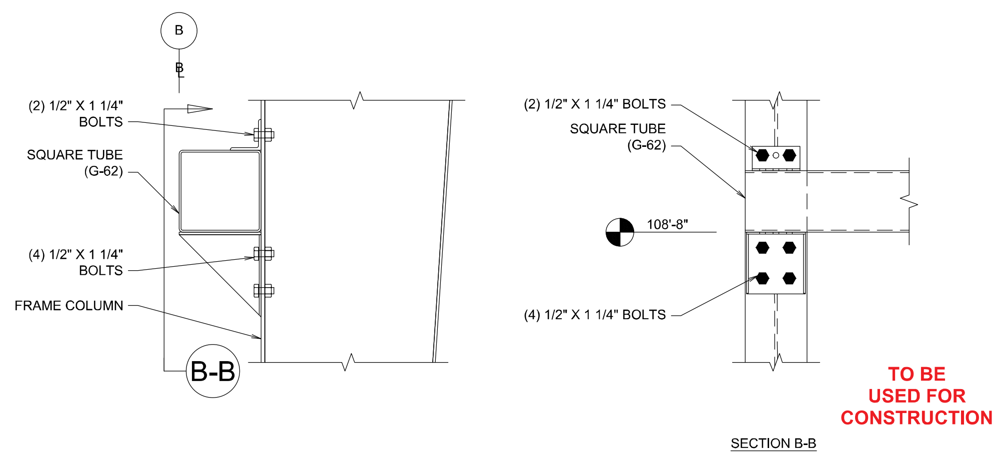
Tightening Notes:

- Tighten rod bracing equally to obtain a square and plumb building that matches corresponding erection drawing dimensions.
- To maintain rigidity of rod bracing after the final tightening, flatten threads on the back side of nut.

Q3 DIAGONAL BRACE ROD, NUT END



W7 ENDWALL GIRT TO RAFTER



TO BE USED FOR CONSTRUCTION

X1

REVISIONS
4
3
2
1

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(308) 389-7289 cs@chiefind.com

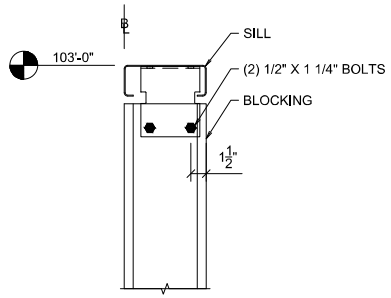
NORTH CAROLINA PROFESSIONAL SEAL 044297 MICHELLE L. H...

03/11/2025

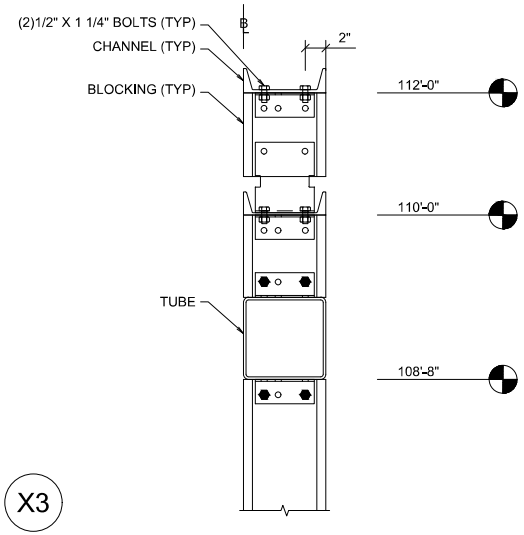
Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D5
2/11/25	3/6/25		D13



X2



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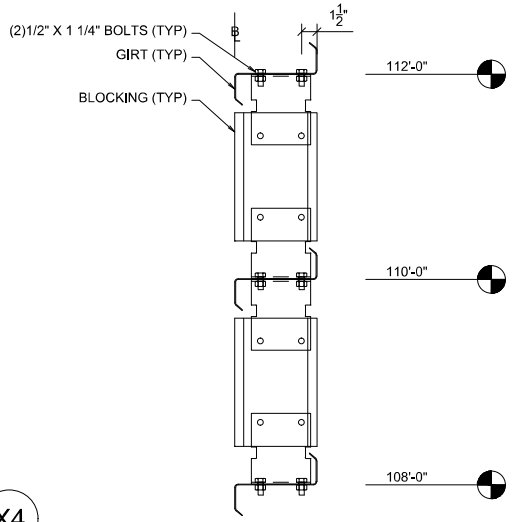

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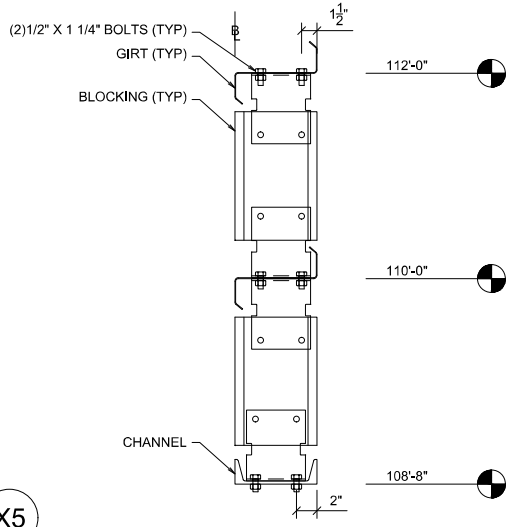

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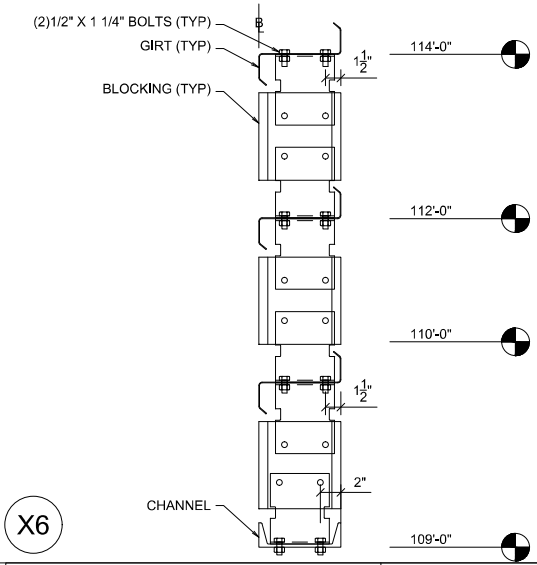

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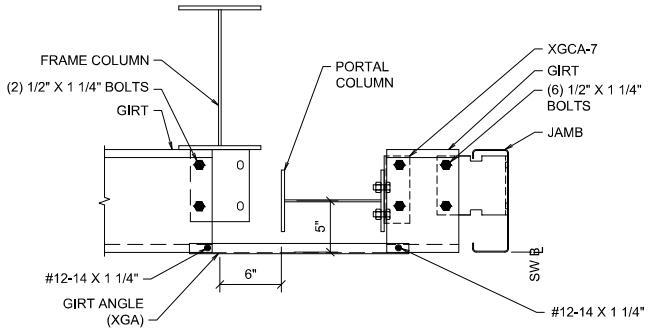

X7

TO BE USED FOR CONSTRUCTION

REVISIONS	
4	
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Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

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(308) 389-7269 cs@chiefmfd.com

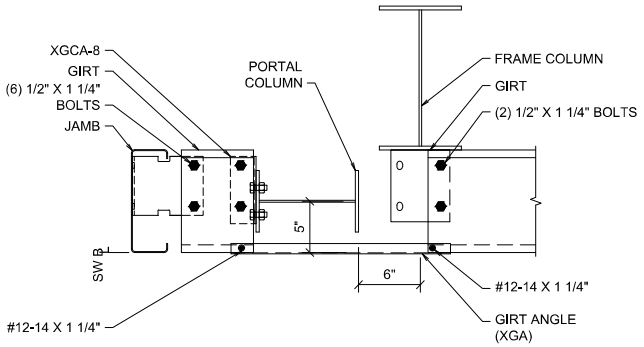
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D6 / D13
2/11/25	3/6/25		

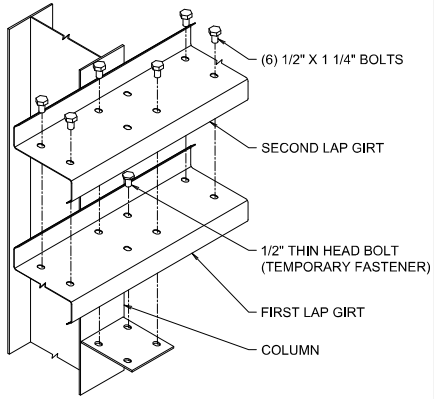


X8

NOTE:
1. The 1/2" Thin Head Bolts are for temporary support to help comply with OSHA regulations during the assembly of girts.
2. Thin Head Bolts are identified with 307A on the head, whereas permanent structural 1/2" bolts are identified with A325 on the head.
3. Do not leave only the 1/2" Thin Head Bolt in for extended period of time as they are not intended for full structural support nor unexpected weather events. Final assembly of girt laps should be per the specific wall girt details using the permanent 1/2" X 1 1/4" bolts and nuts required for structural connection.

STEP 1:
Set the first girt into place. Complete the girt attachment at the tail end. Align the girt holes with the clip holes and place a 1/2" Thin Head Bolt down through the girt in the hole closest to building line.

STEP 2:
Lift the second bay girt into place. Install (6) 1/2" x 1 1/4" bolts and nuts in the proper lap holes and the unfilled clip hole at the tail end and wrench tighten. Install 1/2" Thin Head Bolt at the leading edge as covered in step 1.



TEMPORARY FASTENER AT WALL GIRT

TO BE USED FOR CONSTRUCTION

REVISIONS
4
3
2
1

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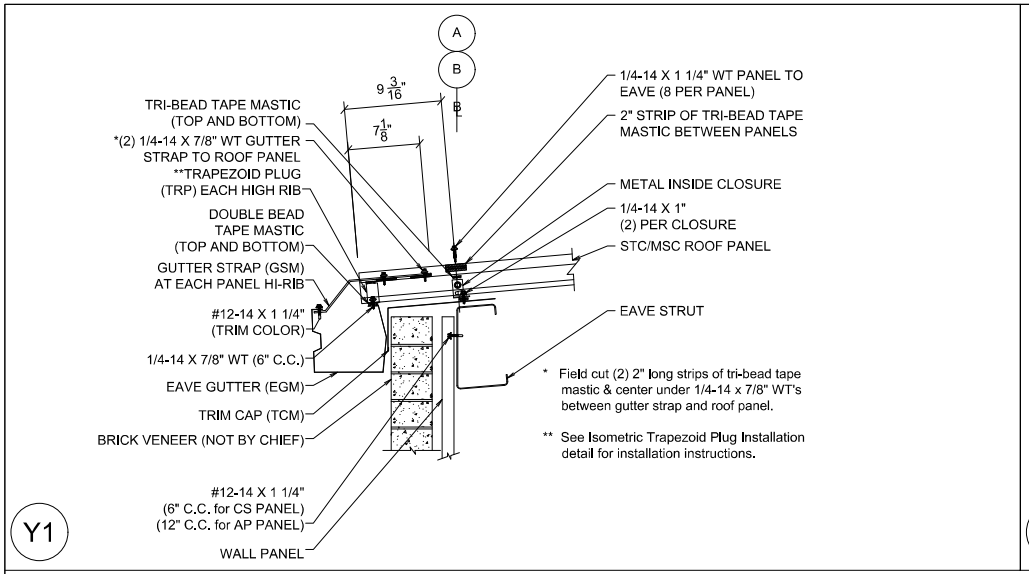
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. KAY

03/11/2025

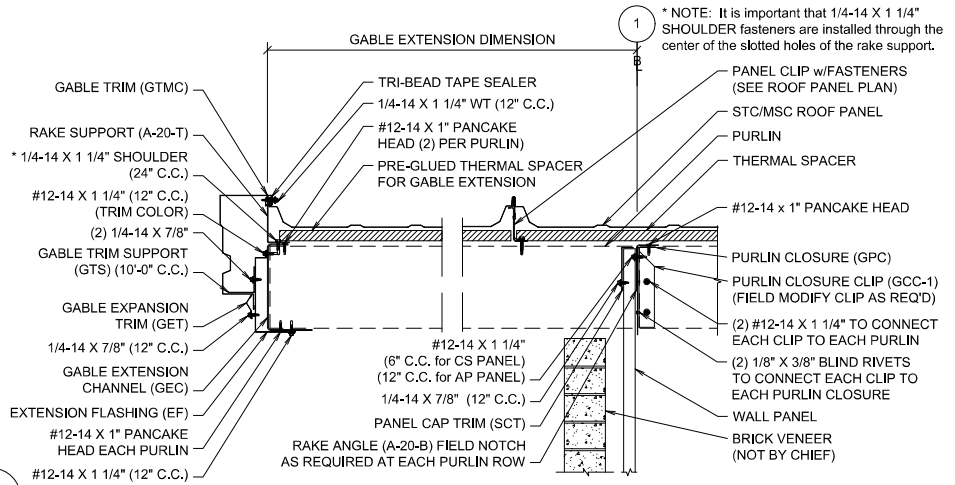
Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D7 / D13
2/11/25	3/6/25		



Y1



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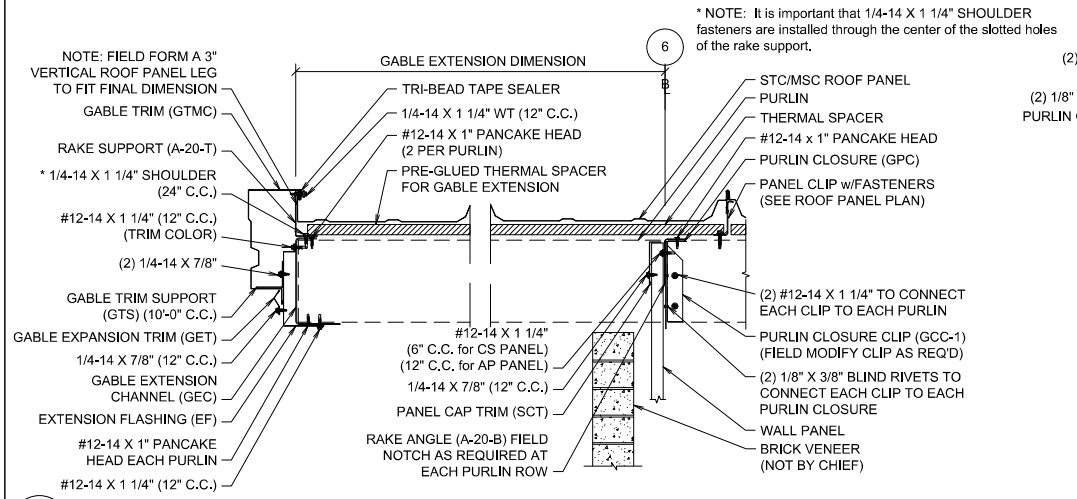
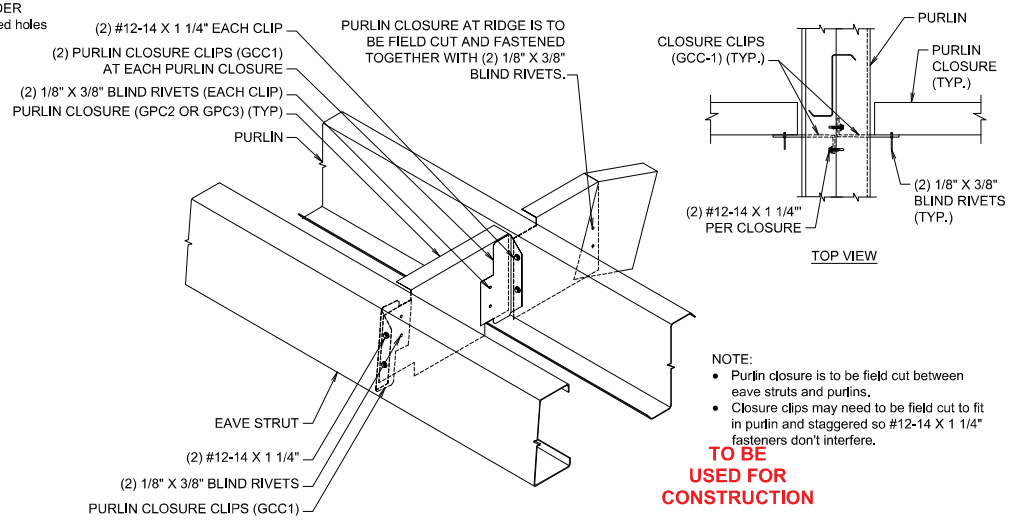


Y3



NOTE:
- Purlin closure is to be field cut between eave struts and purlins.
- Closure clips may need to be field cut to fit in purlin and staggered so #12-14 X 1 1/4" fasteners don't interfere.

TO BE USED FOR CONSTRUCTION

PURLIN CLOSURE INSTALLATION

REVISIONS
4
3
2
1

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(308) 385-7289 cs@chiefmd.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

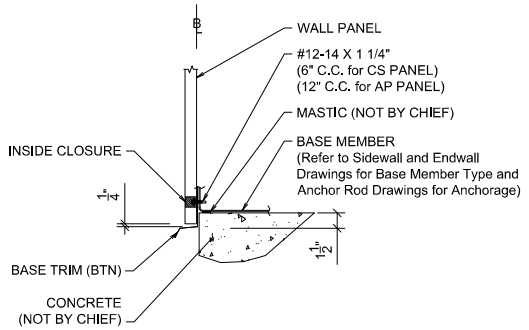
Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

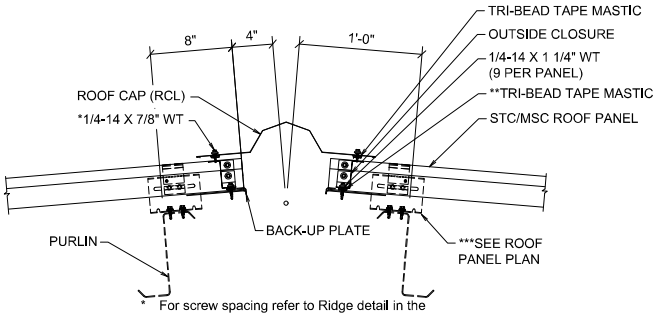
DRAWN	CHECK	ORDER NO.	D8
KAL/BD	ALI/DB	B3025326	D13
2/11/25	3/6/25		

Reference notes:

- Use 1/8" x 3/8" Blind Rivets 10'-0" C.C. to attach Base Trim to Base Member.
- Drill Ø1/8" hole for 1/8" x 3/8" Blind Rivets.
- Provide air gap of 1/4" min. at bottom of panel to avoid corrosion.



BASE TRIM (BTN)
FINISH FLOOR

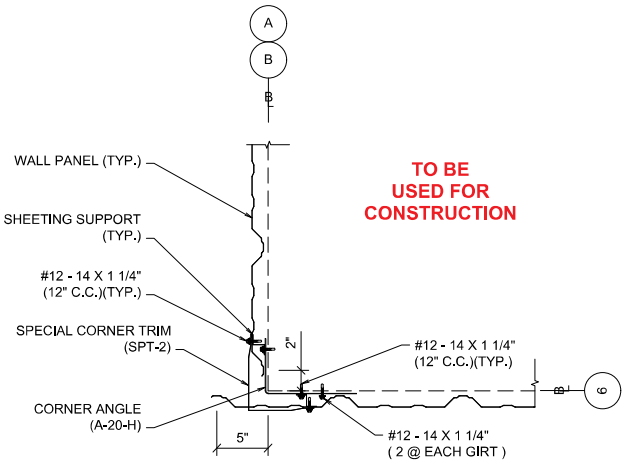


* For screw spacing refer to Ridge detail in the MSC/STC Roof Panel Erection Manual.

** 24" STC - Pre-Cut Tri-Bead Tape Mastic.
24" MSC - Tri-Bead Tape Mastic from roll.
18" MSC/STC - Tri-Bead Tape Mastic from roll.

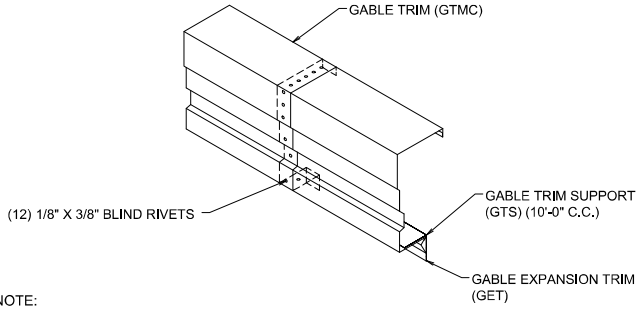
*** Roof Paneling Plan for roof panel clip, panel clip fastener and thermal spacer requirements.

STC-MSC ROOF PANEL RIDGE TRIM DETAIL



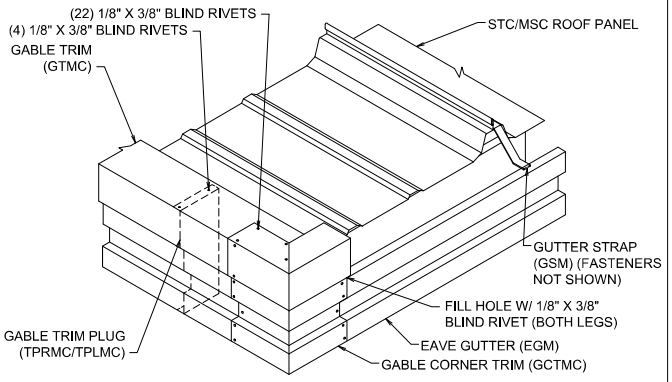
TO BE USED FOR CONSTRUCTION

Y4



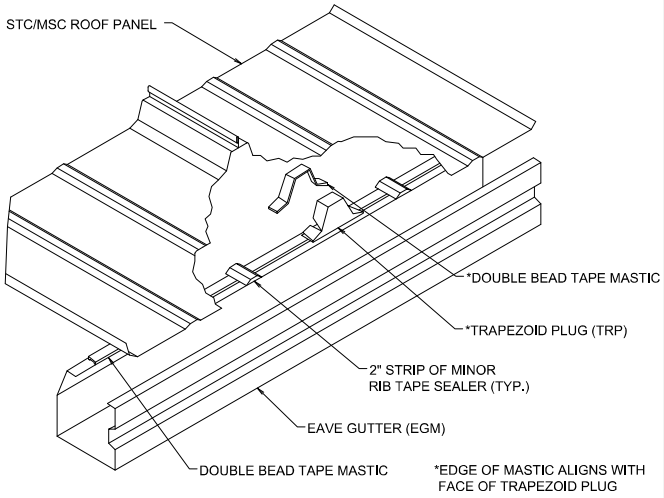
NOTE:
1. Use 2" lap at splices, and field cut 3/8" lockform at splice.
2. Fasten splice with (12) 1/8" x 3/8" blind rivets.
3. Use SIKA 511 sealant at splice.

GABLE TRIM SPLICE



NOTE:
1. Start gable trim 3" out from end of roof panel. Notch gable trim to avoid corner box rivets.
2. Start eave gutter 3" out from endwall building line.
3. Locate Gable Trim Plug as close to building line as possible. Field notch as required.
4. Use SIKA 511 sealant at plug and corner trim to gutter.

GABLE CORNER TRIM WITH GUTTER



*EDGE OF MASTIC ALIGNS WITH FACE OF TRAPEZOID PLUG

TRAPEZOID PLUG INSTALLATION WITH GUTTER

REVISIONS
4
3
2
1

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(308) 385-7289 cs@chiefmfd.com

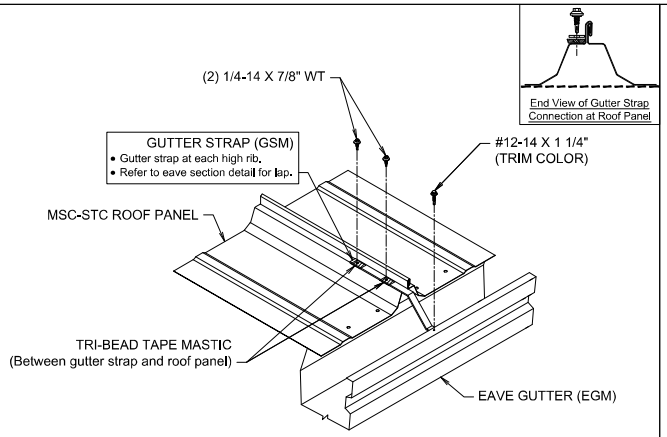
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

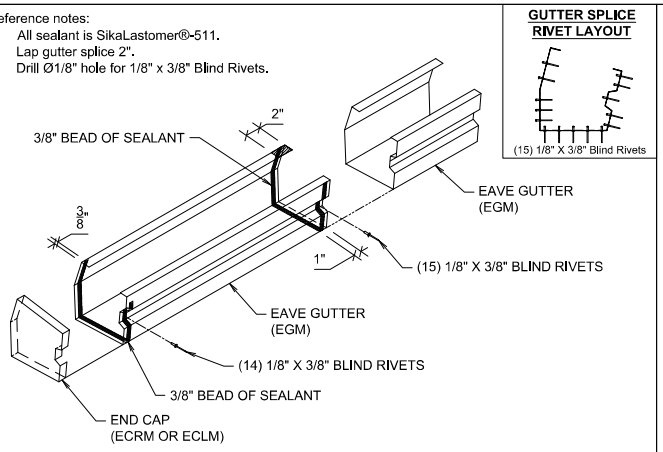
CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D9 / D13
2/11/25	3/6/25		

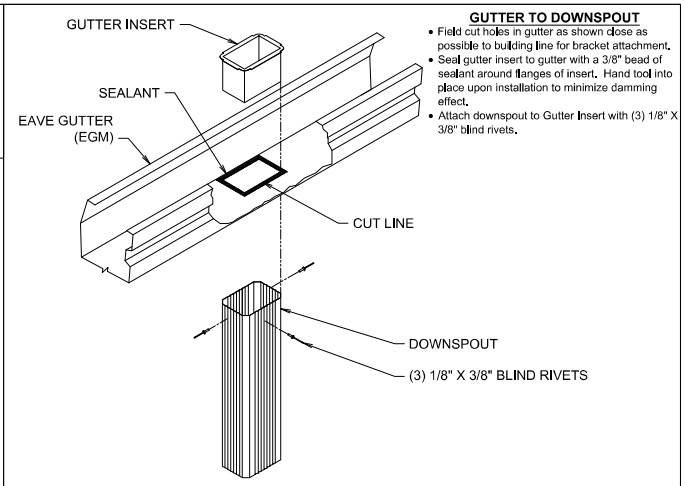


GUTTER STRAP TO ROOF PANEL WITH STANDARD GUTTER
MSC-STC Roof Panel

Reference notes:
- All sealant is SikaLastomer®-511.
- Lap gutter splice 2".
- Drill Ø1/8" hole for 1/8" x 3/8" Blind Rivets.



END CAP AND GUTTER SPLICE WITH STANDARD GUTTER
Standing Seam Roof Panel

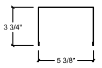


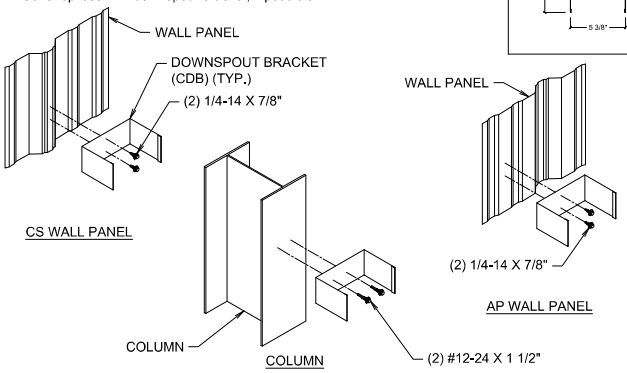
GUTTER TO DOWNSPOUT
- Field cut holes in gutter as shown close as possible to building line for bracket attachment.
- Seal gutter insert to gutter with a 3/8" bead of sealant around flanges of insert. Hand tool into place upon installation to minimize damming effect.
- Attach downspout to Gutter Insert with (3) 1/8" X 3/8" blind rivets.

GUTTER TO CORRUGATED DOWNSPOUT
Standing Seam Roof Panel

Reference notes:
- Locate brackets at 6'-0" C.C.
- Locate bracket on high ribs for CS wall panel.
- Locate bracket on flat of panel for AP wall panel.
- Attach bracket to downspout with (2) 1/8" x 3/8" blind rivets each leg. Cover splices with downspout bracket, if possible.

DOWNSPOUT BRACKET (CDB)

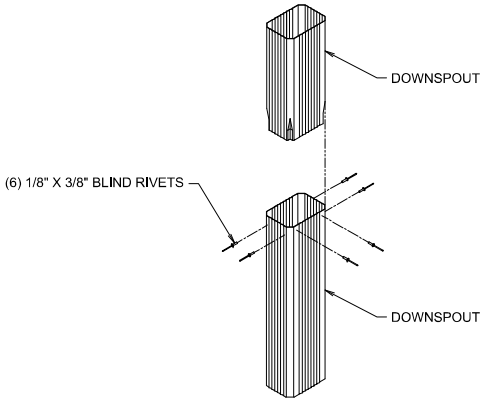




DOWNSPOUT BRACKET WITH STANDARD GUTTER

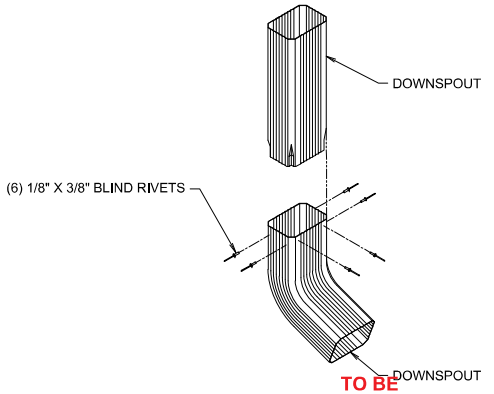
Reference notes:
- Lap downspout splice 2".
- Drill Ø1/8" hole for 1/8" x 3/8" Blind Rivets.
- Refer to Sidewall drawings for the quantity of downspout drops.

CORRUGATED DOWNSPOUT



CORRUGATED DOWNSPOUT SPLICE

Reference notes:
- Lap downspout to elbow splice 2".
- Drill Ø1/8" hole for 1/8" x 3/8" Blind Rivets.
- Refer to Sidewall drawings for the quantity of elbows.



TO BE USED FOR CONSTRUCTION

CORRUGATED DOWNSPOUT ELBOW

REVISIONS
4
3
2
1

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(308) 385-7289 cs@chiefmfd.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. KAL

03/11/2025

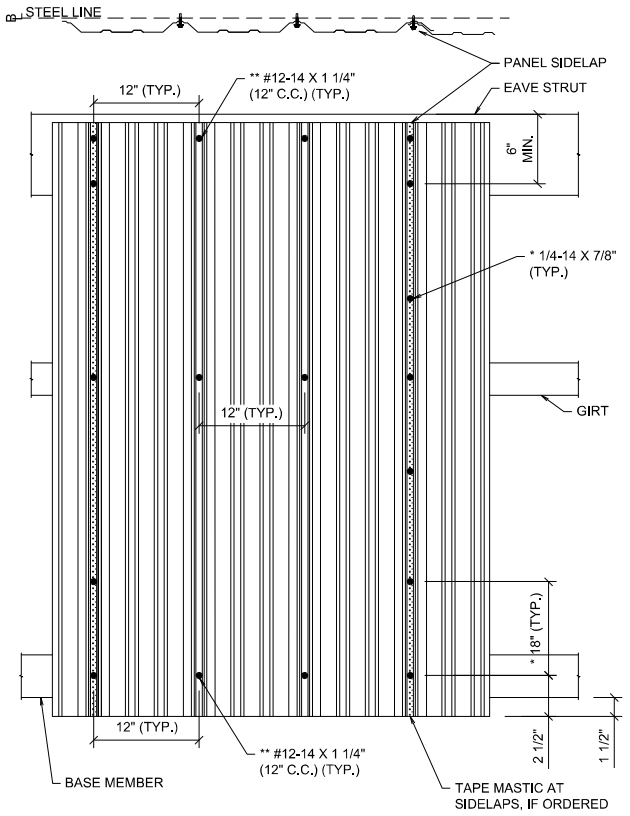
Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

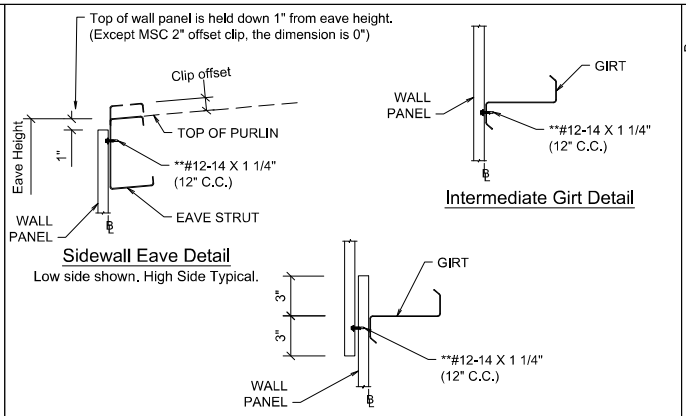
DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D10 / D13
2/11/25	3/6/25		

AP WALL PANEL - The details shown below are typical Chief metal building details. Not all details may apply. Specific details for additional features will be provided for complete installation instructions.

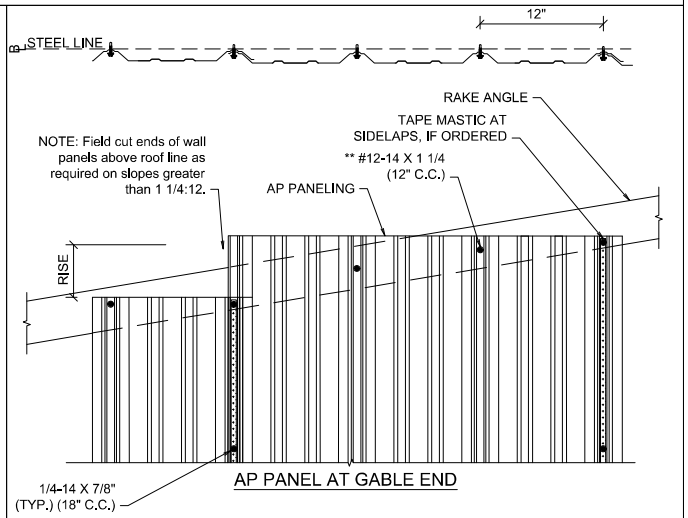
NOTES:
- The structural system must be plumb and square prior to panel installation.
- Care must be taken to insure panel modularity due to accessory locations and trim.
- Insulation has not been shown for clarity.
- Blanket insulation must be trimmed above the bottom of panel to prevent water from "WICKING" into the insulation.
- Provide air gap of 1/4" min. at bottom of panel to avoid corrosion.
- #12-14 X 1 1/4" Fastener spacing is (12" C.C.) unless otherwise noted.
  ** #12-14 X 1-1/4", Blanket Insulation <=4" thickness
  ** #12-14 X 2", Blanket Insulation >4" thickness
- When possible, CHIEF recommends installing panel so that panel lap is away from prevailing weather.



AP PANEL INSTALLATION

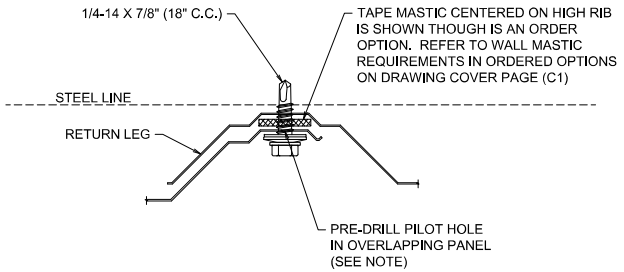


AP PANEL FASTENER INSTALLATION



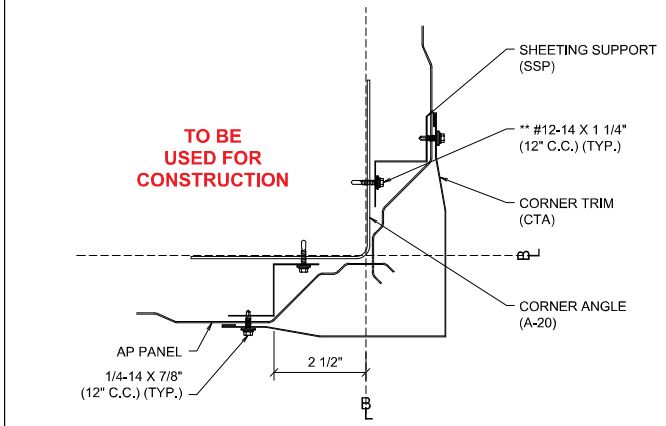
AP PANEL AT GABLE END

NOTE:
- Sidelap holes (7/32" DIA.) must be Pre-drilled in the overlapping corrugation only.
- The overlapping corrugation does not have the return leg.



AP PANEL SIDE LAPS

NOTES:
- Field cut panel if required for corner trim.
- Corner Angle connection/fasteners, refer to Girt Corner Detail.



AP PANEL STANDARD CORNER CONDITION

REVISIONS
4
3
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1

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NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. MARTINEZ

03/11/2025

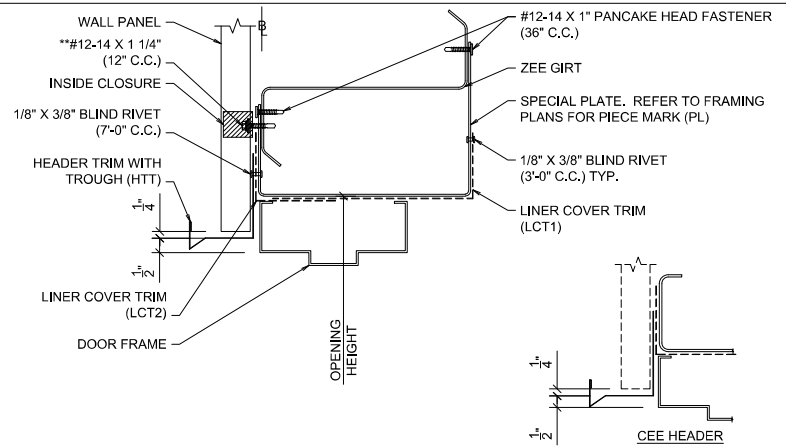
Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D11 / D13
2/11/25	3/6/25		

AP Panel - Metal Building Walkdoor -- Knocked-Down (by Chief) or Door Not by Chief

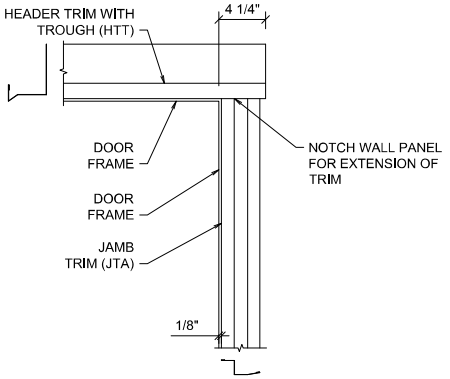
Refer to Order Documents for Doors by Chief



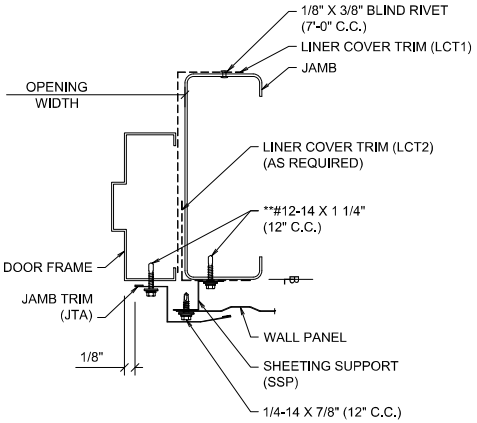
Provide air gap of 1/4" min. at bottom of panel to avoid corrosion.

WALKDOOR HEADER TRIM DETAILS

Notes:
- Hold trims 1/8" back from Walk Door Frame edge (Applies only to walk doors).
- Drill Ø1/8" holes for Blind Rivets.
- Rivets spaced at 7'-0" C.C. are temporary fasteners.
- ** #12-14 X 1-1/4", Blanket Insulation <=4" thickness.
- ** #12-14 X 2", Blanket Insulation >4" thickness.
- LCT1 or LCT2 used with Liner/Backer. Refer to Liner or Partition Panel Dwg.

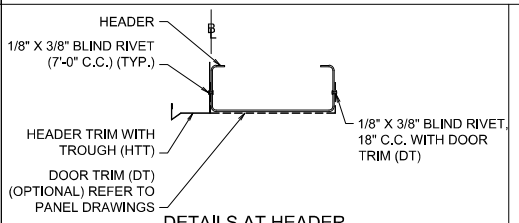


TRIM DETAIL AT CORNER

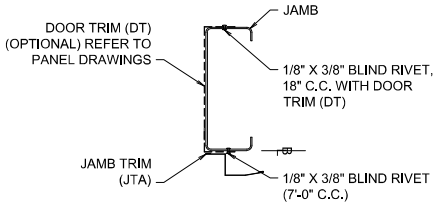


WALKDOOR JAMB TRIM DETAILS

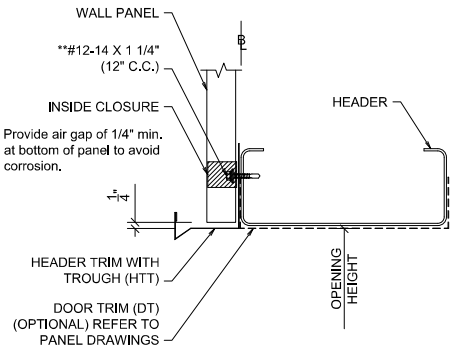
AP Panel - OHD or 3-Sided Opening



DETAILS AT HEADER

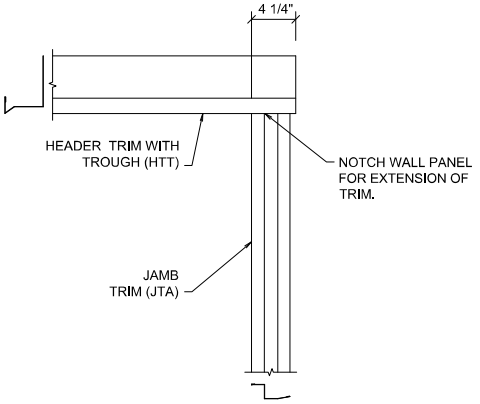


DETAILS AT JAMB

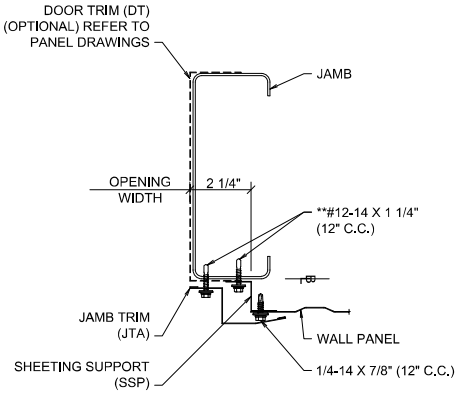


TRIM DETAILS AT HEADER

Notes:
- Drill Ø1/8" holes for Blind Rivets.
- Rivets spaced at 7'-0" C.C. are temporary fasteners.
- ** #12-14 X 1-1/4", Blanket Insulation <=4" thickness.
- ** #12-14 X 2", Blanket Insulation >4" thickness.



TRIM DETAIL AT CORNER



TO BE USED FOR CONSTRUCTION

TRIM DETAILS AT JAMBS

REVISIONS
4
3
2
1

Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7269 cs@chiefmfd.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

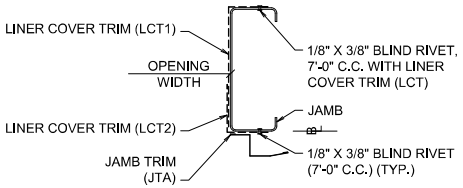
03/11/2025

Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

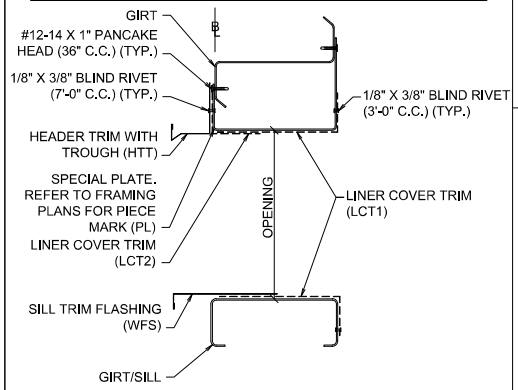
CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	D12 / D13
KAL/BD	ALI/DB	B3025326	
2/11/25	3/6/25		

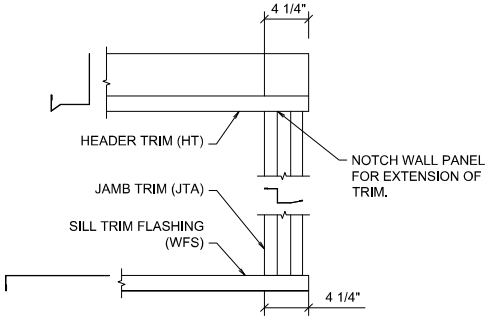
AP Panel - Window or 4-Sided Opening with Sill Flashing – WFS



FRAMED OPENING DETAILS AT JAMB

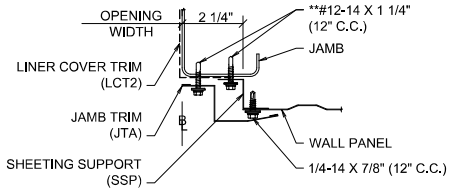


OPENING DETAILS AT HEADER AND SILL

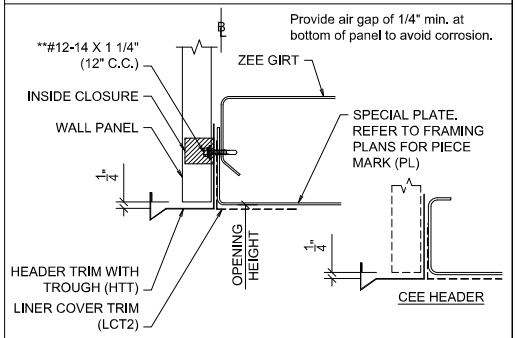


TRIM DETAIL AT CORNER

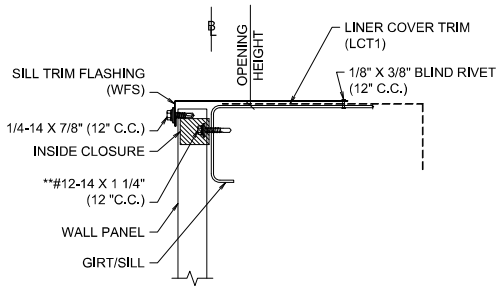
Notes:
- Drill Ø1/8" holes for Blind Rivets.
- Rivets spaced at 7'-0" C.C. are temporary fasteners.
- ** #12-14 X 1-1/4", Blanket Insulation <=4" thickness.
- ** #12-14 X 2", Blanket Insulation >4" thickness.
- LCT1 or LCT2 used with Liner/Backer. Refer to Liner or Partition Panel Dwg.



TRIM DETAILS AT JAMB



TRIM DETAILS AT HEADER



TRIM DETAIL AT SILL (WFS)

TO BE USED FOR CONSTRUCTION

REVISIONS
4
3
2
1

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PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7269 cs@chiefind.com

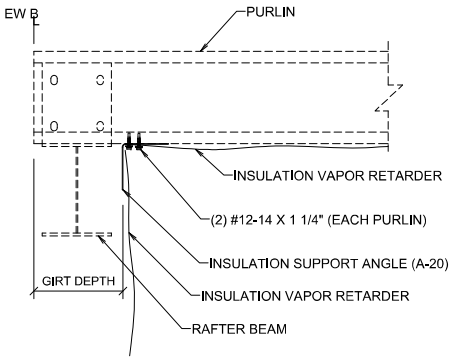
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. KAL

03/11/2025

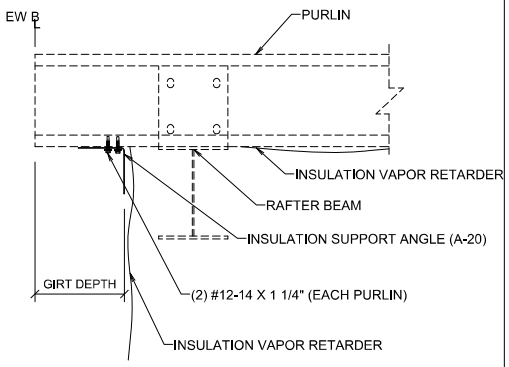
Drawing	DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

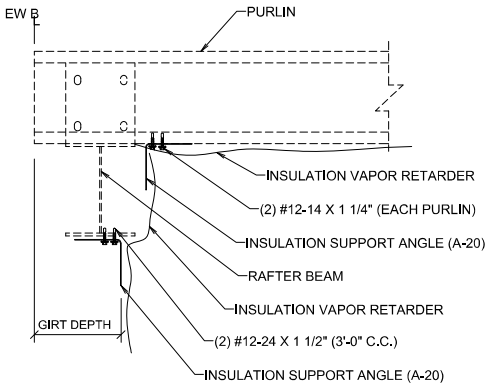
DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI/DB	B3025326	D13
2/11/25	3/6/25		D13



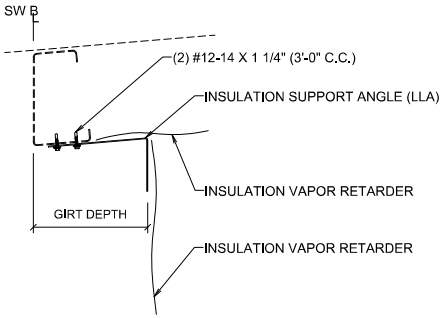
INSULATION SUPPORT ANGLE AT GABLE



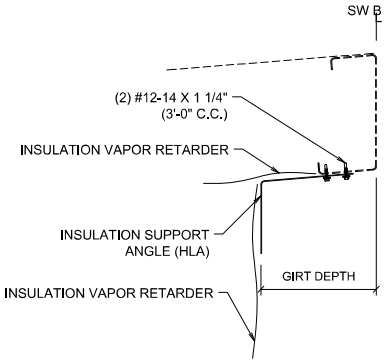
INSULATION SUPPORT ANGLE AT GABLE



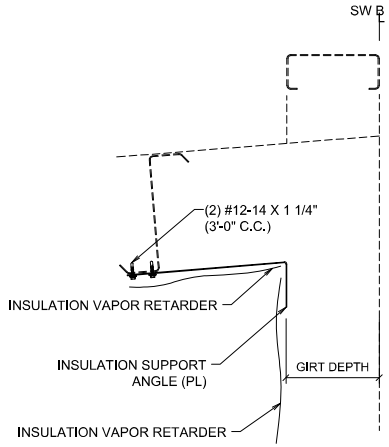
INSULATION SUPPORT ANGLE AT GABLE



INSULATION SUPPORT ANGLE AT EAVE
(WITH LLA)



INSULATION SUPPORT ANGLE AT EAVE
(WITH HLA)



INSULATION SUPPORT ANGLE AT PARAPET HIGH
SIDE EAVE (WITH PL)

TO BE USED FOR CONSTRUCTION

RELEASED	10-10-24
SUPERSEDES	04-04-23

REVISIONS

4
3
2
1

Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

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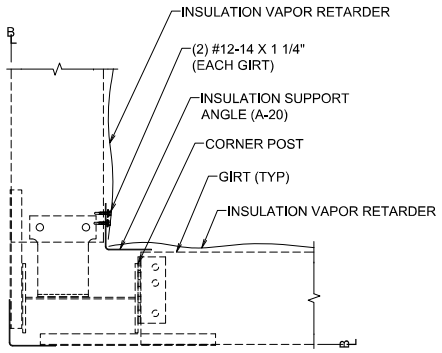
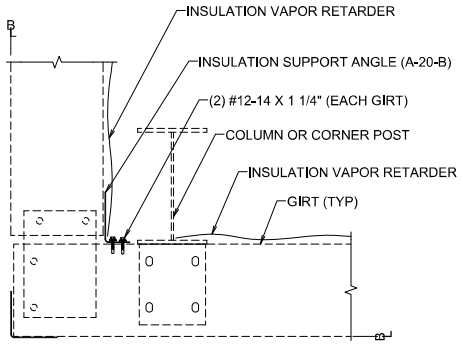
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L

03/11/2025

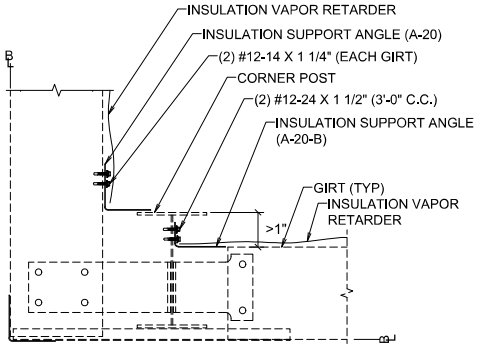
Drawing	INSULATION SUPPORT ANGLES - EAVE AND GABLES			
Buyer	Triangle Home Pros, LLC			
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526			
Project Name	E & M Concrete			
CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	GD1
	KAL/BD	ALI	B3025326	GD7
	2/11/25	3/6/25		



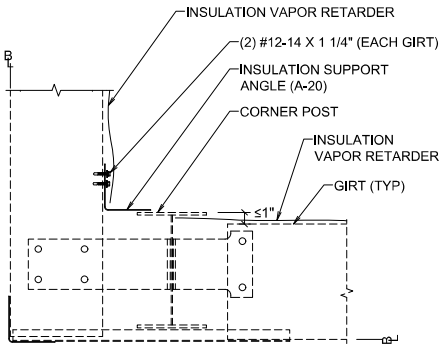
INSULATION SUPPORT ANGLE AT INSIDE OF CORNERS
(AT CORNER POST)



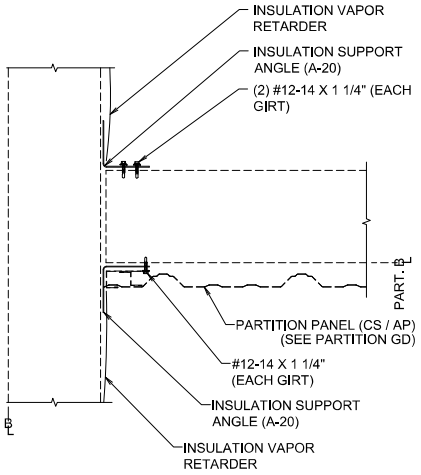
INSULATION SUPPORT ANGLE AT INSIDE OF CORNERS
(AT COLUMN OR CORNER POST)



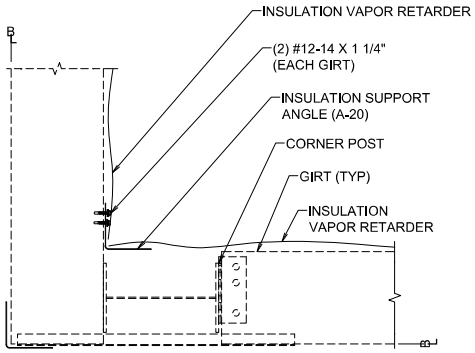
INSULATION SUPPORT ANGLE AT INSIDE OF CORNERS
(WITH ADDITIONAL SUPPORT ANGLE)



INSULATION SUPPORT ANGLE AT INSIDE OF CORNERS
(AT CORNER POST)



INSULATION SUPPORT ANGLE AT INSIDE OF CORNERS
(AT PARTITION)



INSULATION SUPPORT ANGLE AT INSIDE OF CORNERS
(AT CORNER POST)

TO BE USED FOR CONSTRUCTION

RELEASED	10-10-24
SUPERSEDES	04-04-23

REVISIONS

4 —

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2 —

1 —

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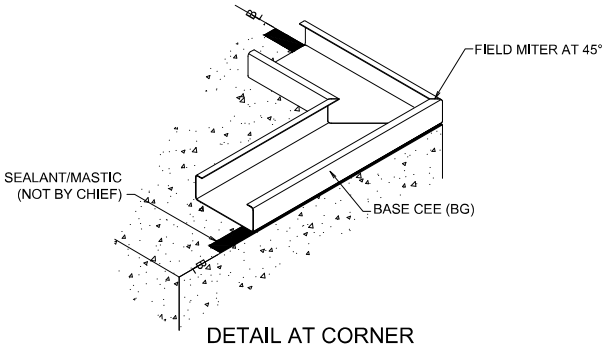
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

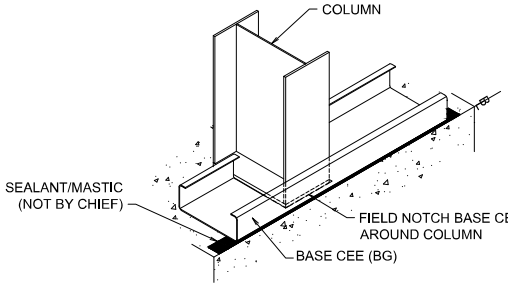
03/11/2025

Drawing	INSULATION SUPPORT ANGLES - INSIDE CORNERS			
Buyer	Triangle Home Pros, LLC			
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526			
Project Name	E & M Concrete			
CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	GD2 / GD7
	KAL/BD	ALI	B3025326	
	2/11/25	3/6/25		

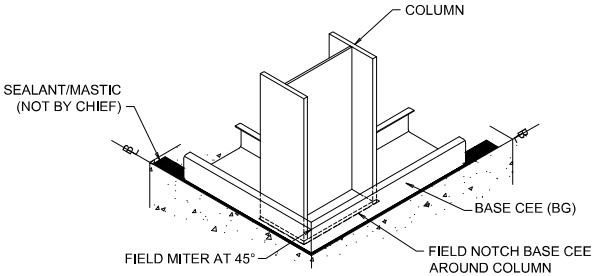
BASE CEE - The details shown below are typical Chief metal building details. Not all details may apply.



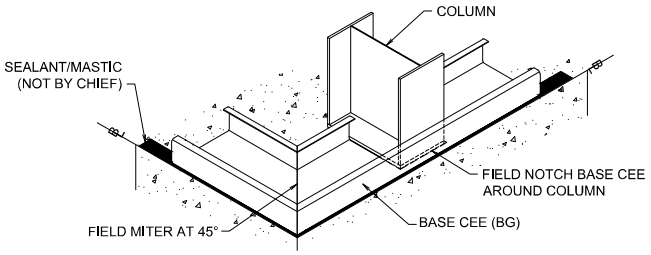
DETAIL AT CORNER



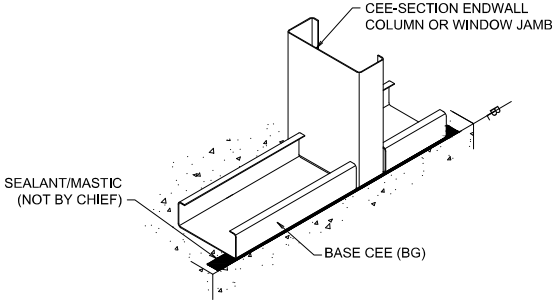
DETAIL AT COLUMN



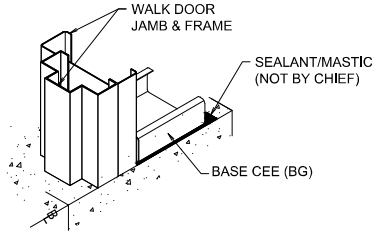
DETAIL AT CORNER COLUMN



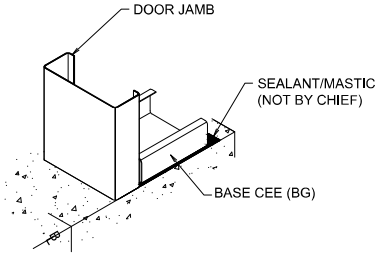
DETAIL AT CORNER COLUMN



DETAIL AT CEE-SECTION COLUMN/JAMB



DETAIL AT WALK DOOR



DETAIL AT OVERHEAD DOOR

TO BE USED FOR CONSTRUCTION

BASE MEMBER NOTES:

- Base Cees are supplied in 20' lengths. Pre-punched 5/16 x 1-1/8" slots are provided for convenience. Anchors are not required in all holes, nor must the pre-punched spacing be used.
- Refer to Anchor Rod Drawing, "Fastener Spacing Chart" for fastener types and spacing requirements.
- Refer to Wall Framing Drawings for locations of BGs.
- Apply a continuous bead of sealant or mastic (Not by Chief) between the Base Cee and concrete. Field cut, notch, and miter at corners where required.

RELEASED	10-04-23
SUPERSEDES	

REVISIONS

4 —
3 —
2 —
1 —

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(308) 389-7269 cs@chiefmfd.com

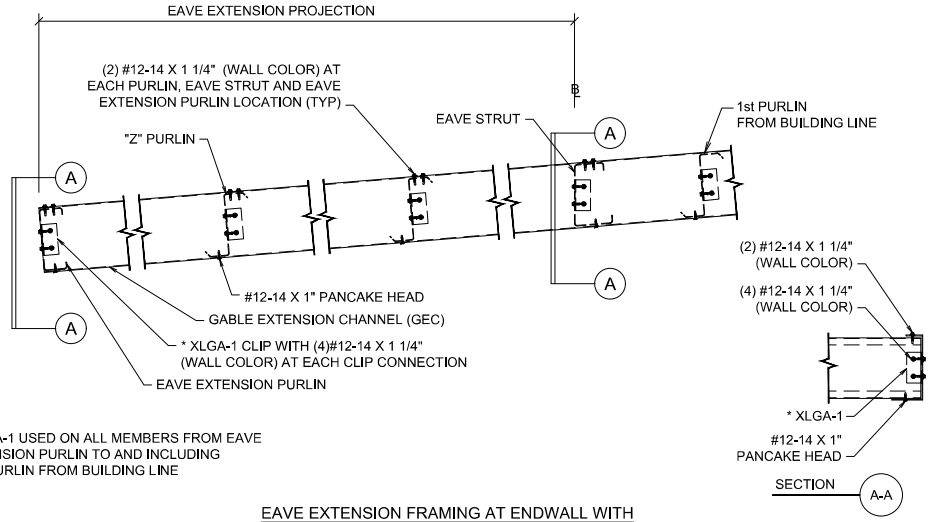
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

Drawing	BASE CEE DETAILS (BG-8/BG-10)
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

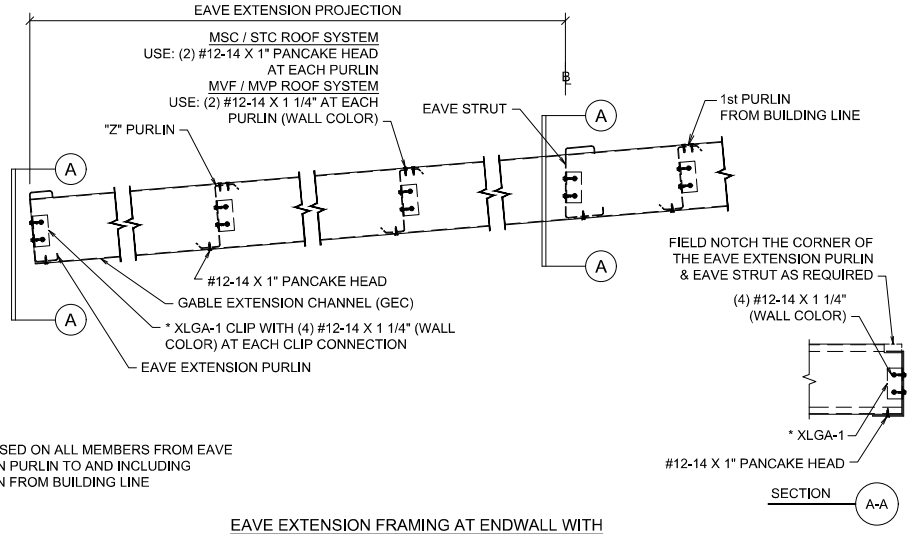
CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI	B3025326	GD3 / GD7
2/11/25	3/6/25		



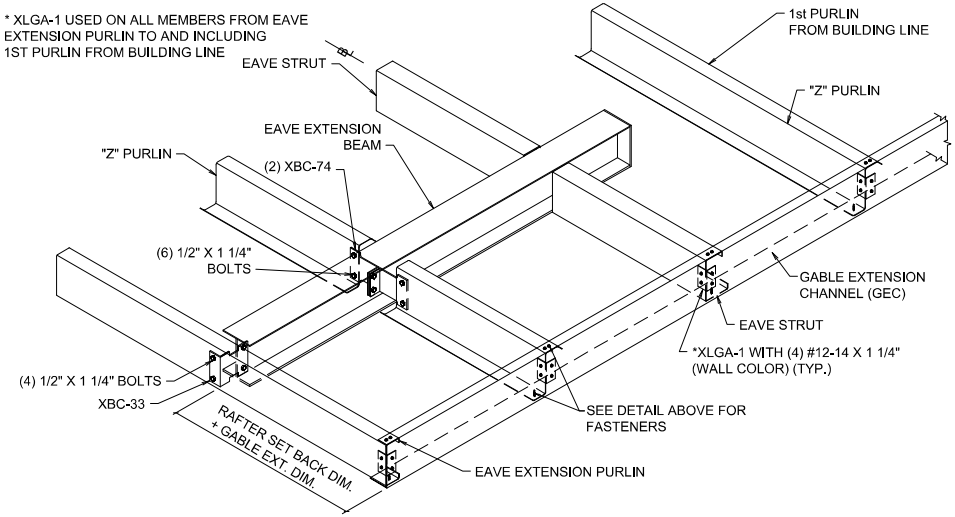
* XLGA-1 USED ON ALL MEMBERS FROM EAVE EXTENSION PURLIN TO AND INCLUDING 1ST PURLIN FROM BUILDING LINE

EAVE EXTENSION FRAMING AT ENDWALL WITH GABLE EXTENSION AND "CS" ROOF PANEL

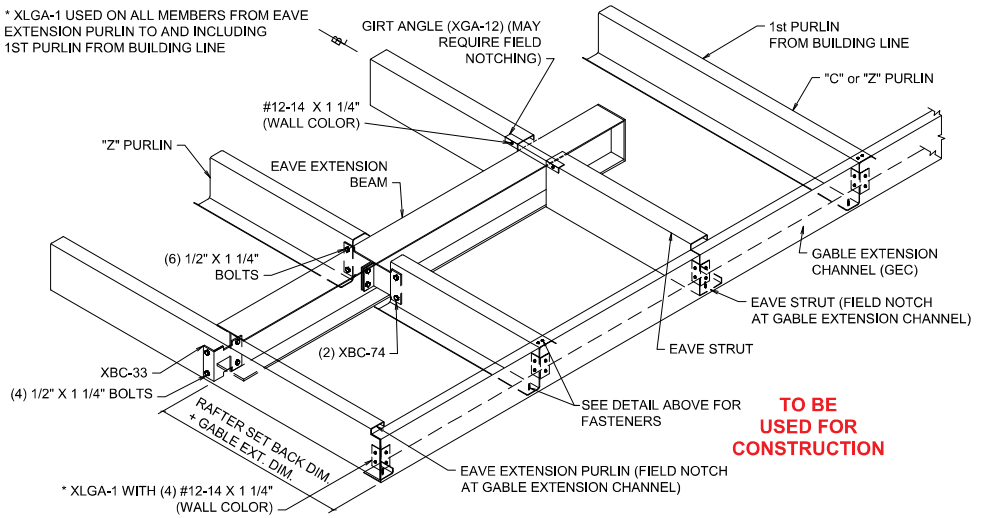


* XLGA-1 USED ON ALL MEMBERS FROM EAVE EXTENSION PURLIN TO AND INCLUDING 1ST PURLIN FROM BUILDING LINE

EAVE EXTENSION FRAMING AT ENDWALL WITH GABLE EXTENSION AND "STANDING SEAM" ROOF PANEL



EAVE EXTENSION FRAMING AT ENDWALL WITH GABLE EXTENSION AND "CS" ROOF PANEL



EAVE EXTENSION FRAMING AT ENDWALL WITH GABLE EXTENSION AND "STANDING SEAM" ROOF PANEL

MBS

RELEASED	9-23-19
SUPERSEDES	03-20-19

REVISIONS

4
3
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1

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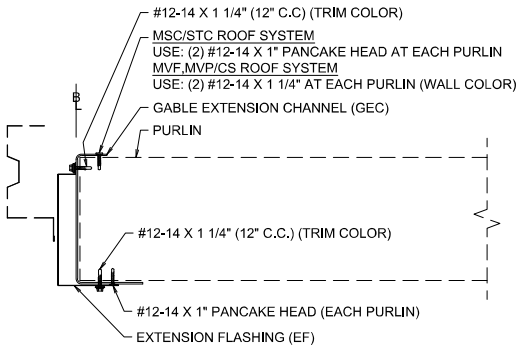
(308) 386-7289 cs@chiefmfd.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. ALI

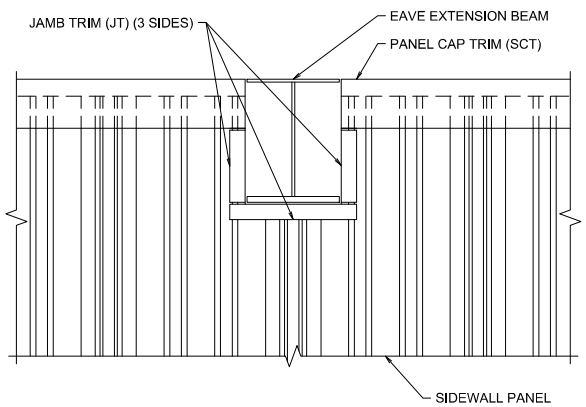
03/11/2025

Drawing	EAVE & GABLE EXTENSION DETAILS (LOW SIDE)			
Buyer	Triangle Home Pros, LLC			
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526			
Project Name	E & M Concrete			
CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	GD4
	KAL/BD	ALI	B3025326	GD7
	2/11/25	3/6/25		



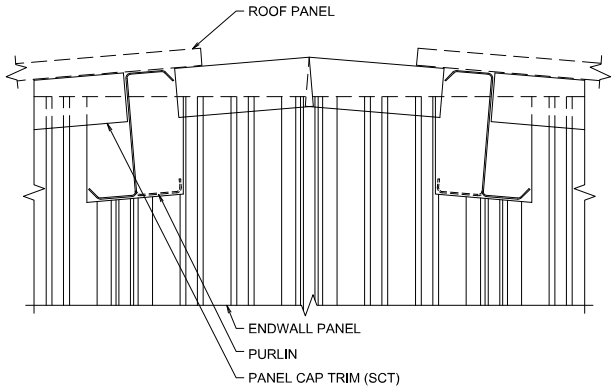
NOTE:
Refer to gable sections for roof panel attachment and gable trim connection at the building's gable areas.

TRIM AT GABLE OF EAVE EXTENSION ONLY - UNSOFFITED



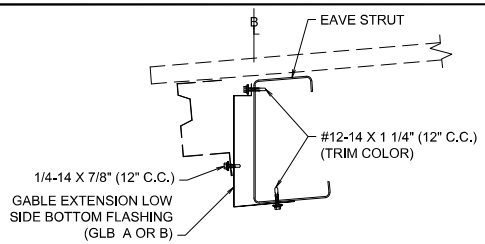
NOTES:
- Field notch wall panels around the eave extension beam as required.
- Roof panel is not shown.

DETAIL AT EXTENSION BEAM OF UNSOFFITED EAVE EXTENSION



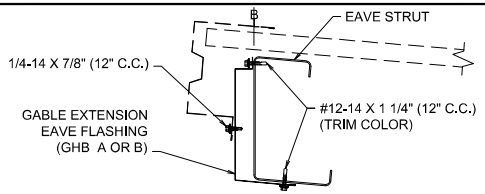
NOTES:
- Field cut endwall panels as required at bottom of purlins and roof panel.
- Purlin closure and closure clips are not shown.

RIDGE DETAIL AT UNSOFFITED GABLE EXTENSION



NOTE:
Refer to eave sections for roof panel attachment and eave trim connection at the building's eave areas.

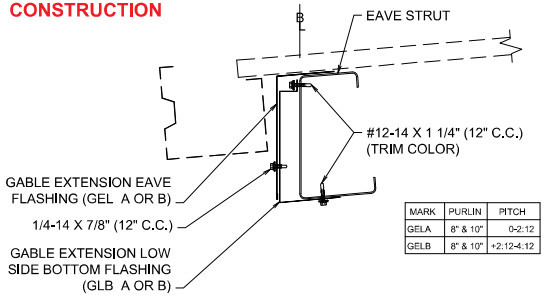
EAVE OF GABLE EXTENSION ONLY UNSOFFITED (LOWSIDE) w/EAVE TRIM



NOTE:
Refer to eave sections for roof panel attachment and eave trim connection at the building's eave areas.

EAVE OF GABLE EXTENSION ONLY UNSOFFITED (HIGH SIDE) w/EAVE TRIM

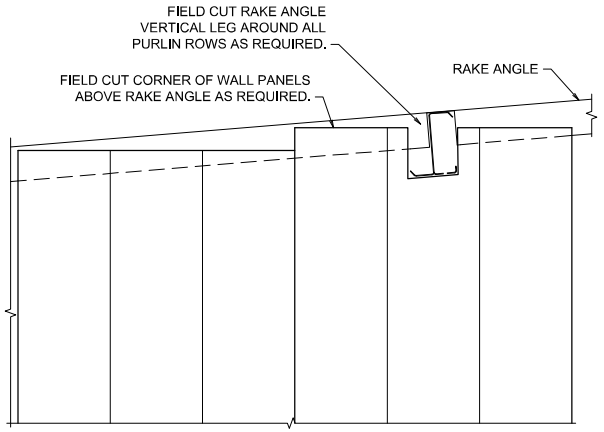
TO BE USED FOR CONSTRUCTION



MARK	PURLIN	PITCH
GELA	8" & 10"	0-2:12
GELB	8" & 10"	+2:12-4:12

NOTE:
Refer to eave sections for roof panel attachment and eave gutter connection at the building's eave areas.

EAVE OF GABLE EXTENSION ONLY UNSOFFITED (LOWSIDE) w/GUTTER



NOTES:
- Trim not shown refer to sections in erection drawings.
- Field cut wall panel around purlins as required.

CONDITION AT UNSOFFITED GABLE EXTENSION

MBS

EAVE AND GABLE EXT. UNSOFFITED DETAILS
WALLS ARE PANELED

RELEASED	12-10-24
SUPERSEDES	06-25-20

REVISIONS

4 —
3 —
2 —
1 —

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(308) 389-7289 cs@chiefind.com

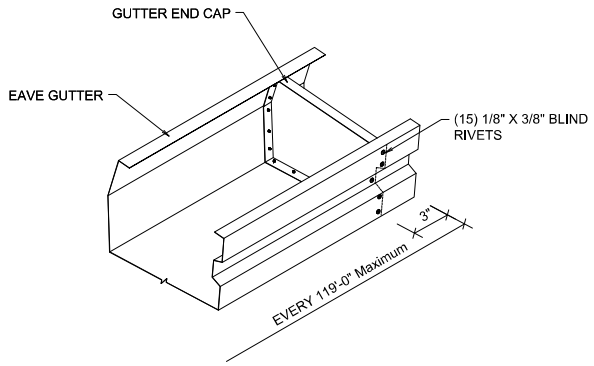
NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. ALI

03/11/2025

Drawing	EAVE & GABLE EXTENSION TRIM DETAILS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

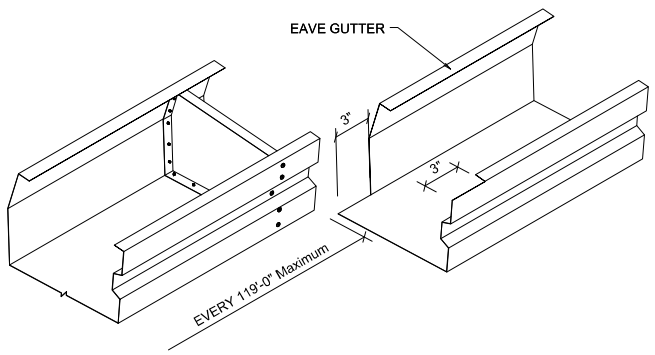
CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	
KAL/BD	ALI	B3025326	GD5 / GD7
2/11/25	3/6/25		



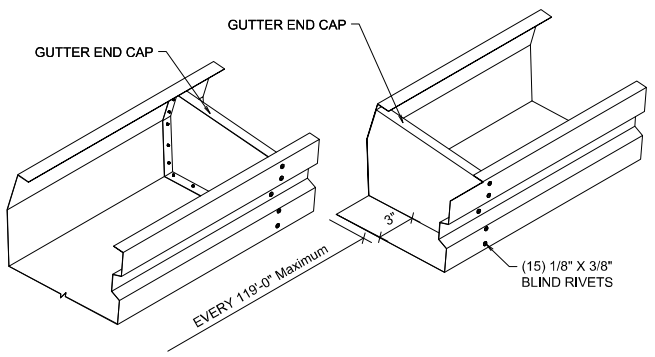
STEP 1:

- Install gutter up to point that expansion joint is to be located.
- Assemble gutter end cap into bead of sealant 3" from gutter end prior to attaching gutter to roof panel.



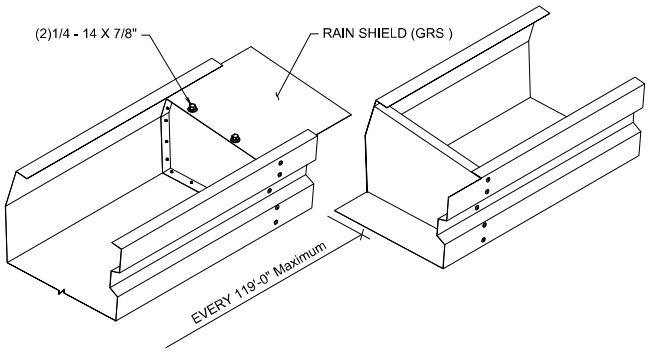
STEP 2:

- Remove 3" of material from next piece of gutter as shown.



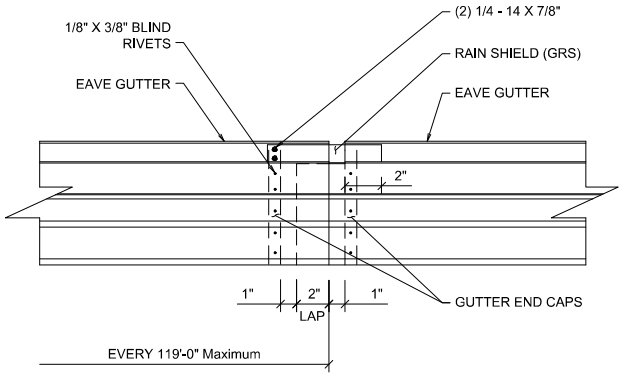
STEP 3:

- Assemble gutter end cap into bead of sealant 3" from gutter end.

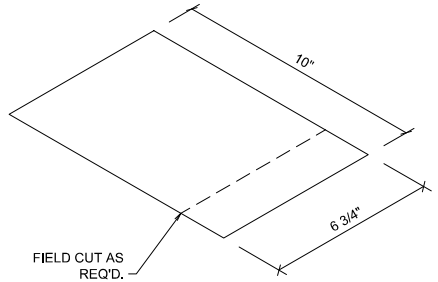


STEP 4:

- Lap the gutters 2". Do **NOT** install any fasteners in the lapped area.
- Using (2) 1/4 - 14 X 7/8" fasteners, assemble rain shield to only one gutter end cap. Do **NOT** fasten to both end caps.



FRONT VIEW



TO BE USED FOR CONSTRUCTION

RAIN SHIELD (GRS)

RELEASED	10-31-22
SUPERSEDES	06-29-11

REVISIONS

4
3
2
1

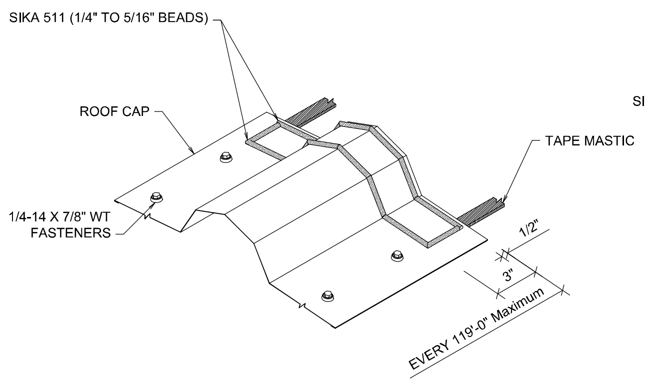
Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

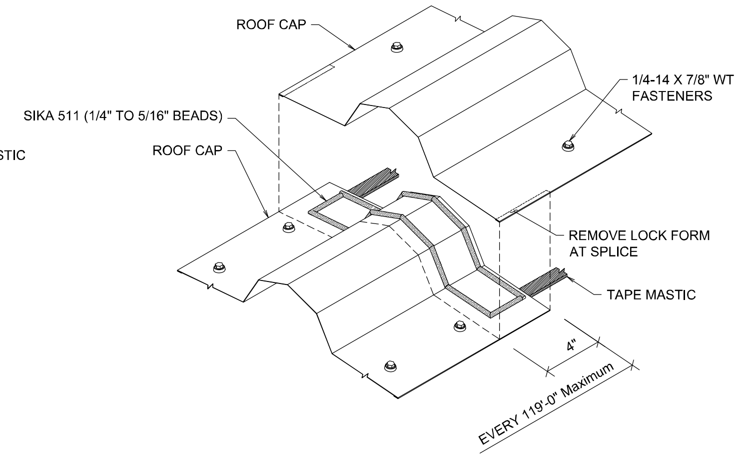
Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7289 cs@chiefind.com

NORTH CAROLINA PROFESSIONAL SEAL 044297 ENGINEER MICHELLE L. [illegible]

03/11/2025

Drawing	GUTTER EXPANSION JOINT			
Buyer	Triangle Home Pros, LLC			
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526			
Project Name	E & M Concrete			
CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	GD6
	KAL/BD	ALI	B3025326	GD7
	2/11/25	3/6/25		





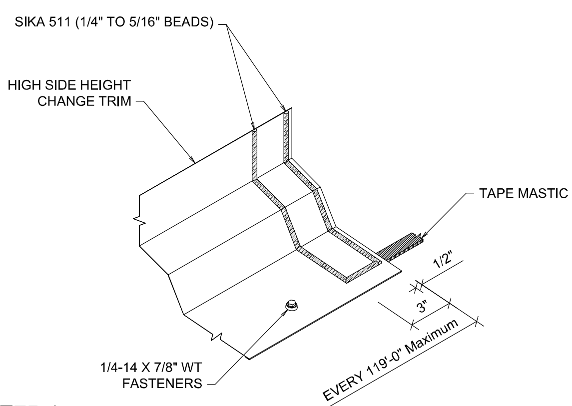
STEP 1:

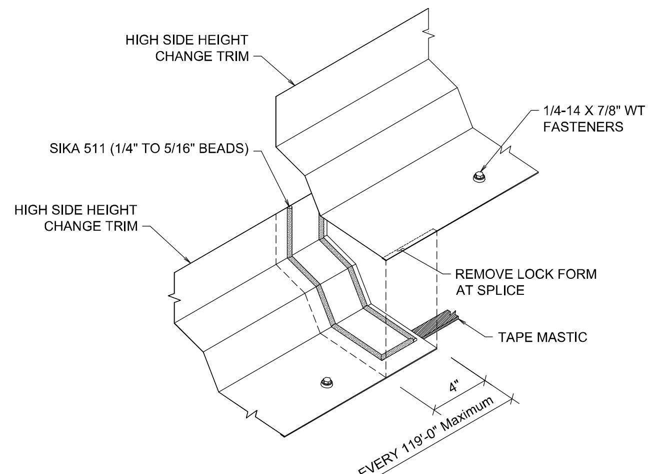
- Install roof cap up to the point that expansion joint is to be located.
- Apply (2) beads of Sikalastomer 511 sealant as shown.

ROOF CAP TRIM SPLICE AT EXPANSION JOINT

STEP 2:

- Lap next roof cap piece onto previous piece 4".
- Do **not** install fasteners in the overlap.





STEP 1:

- Install high side height change trim up to the point that expansion joint is to be located.
- Apply (2) beads of Sikalastomer 511 sealant as shown.

HIGH SIDE HEIGHT CHANGE TRIM SPLICE AT EXPANSION JOINT

STEP 2:

- Lap next high side height change trim onto previous piece 4".
- Do **not** install fasteners in the overlap.

TO BE USED FOR CONSTRUCTION

RELEASED	10-31-22
SUPERSEDES	06-29-11

REVISIONS
4
3
2
1

Notwithstanding the adjacent seal, neither the Engineer named nor Chief Buildings is acting as The Engineer of Record. The Engineer named and Chief Buildings responsibility is limited to the structural performance of the pre-engineered components designed by Chief Buildings.

Chief Buildings
PO Box 2078, Grand Island, NE 68802-2078
(308) 389-7289 cs@chiefind.com

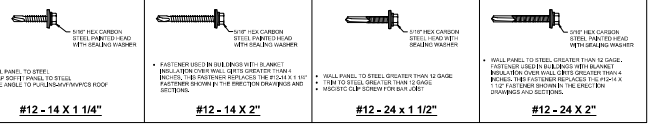
NORTH CAROLINA PROFESSIONAL SEAL 044297 MICHELLE L. HO
03/11/2025

Drawing	STANDING SEAM EXPANSION TRIM JOINTS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS	DRAWN	CHECK	ORDER NO.	GD7
	KAL/BD	ALI	B3025326	
	2/11/25	3/6/25		GD7

Commonly Used Parts: Not all parts shown will be required on all projects.

#12 Fasteners



- WALL PANEL TO STEEL
- CSAP SOFFIT PANEL TO STEEL
- RAKE ANGLE TO PURLIN-SAVM/WVPCS ROOF

#12 - 14 X 1 1/4"

- FASTENER USED IN BUILDINGS WITH BLANKET INSULATION OVER WALL GIRTS GREATER THAN 4 INCHES. THIS FASTENER REPLACES THE #12-14 X 1 1/2" FASTENER SHOWN IN THE ERECTION DRAWINGS AND SECTIONS.

#12 - 14 X 2"

- WALL PANEL TO STEEL GREATER THAN 12 GAGE
- TRIM TO STEEL GREATER THAN 12 GAGE
- MSCSTC CLIP SCREW FOR BAR JOIST

#12 - 24 x 1 1/2"

- WALL PANEL TO STEEL GREATER THAN 12 GAGE, FASTENER USED IN BUILDINGS WITH BLANKET INSULATION OVER WALL GIRTS GREATER THAN 4 INCHES. THIS FASTENER REPLACES THE #12-14 X 1 1/2" FASTENER SHOWN IN THE ERECTION DRAWINGS AND SECTIONS.

#12 - 24 X 2"

#12 W/O Fasteners

- MVF/MVP CLIP TO PURLIN WITH UP TO 4" THICK INSULATION
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS - MVF/MVP ROOF
- DECKING ATTACHMENT TO PURLINS

#12 - 14 X 1 1/4" W/O

- MVF/MVP CLIP TO PURLIN WITH OVER 4" THICK INSULATION
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS - MVF/MVP ROOF

#12 - 14 X 1 1/2" W/O

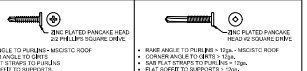
- MVF/MVP CLIP TO BAR JOIST WITH UP TO 4" THICK INSULATION
- DECKING ATTACHMENT TO BAR JOIST AND BEAMS

#12 - 24 X 1 1/4" W/O

- MVF/MVP CLIP TO BAR JOIST WITH OVER 4" THICK INSULATION

#12 - 24 X 1 1/2" W/O

PANCAKE HEAD



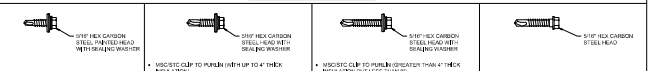
- RAKE ANGLE TO PURLINS - MSCSTC ROOF
- CORNER ANGLE TO GIRTS
- SAB FLAT STRAPS TO PURLINS
- FLAT SOFIT TO SUPPORTS
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS - CS ROOF

#12-14 X 1" PANCAKE HEAD

- RAKE ANGLE TO PURLINS - 10ga. - MSCSTC ROOF
- CORNER ANGLE TO GIRTS - 12ga.
- SAB FLAT STRAPS TO PURLINS - 12ga.
- FLAT SOFIT TO SUPPORTS - 12ga.
- SUPPORT PLATE TO PURLINS - 12ga. AT HIP OR VALLEY CONDITIONS - CS ROOF

#12-24 X 1 1/2" PANCAKE HEAD

#1/4"-14 Fasteners



- WALL OR SOFIT PANEL THRU TO PANEL OR PANEL TO PANEL
- MEZZANINE DECKING AT SIDE LAPS.
- WALL OR SOFIT PANEL THRU TO THRU

1/4 - 14 X 7/8"

- MSCSTC CLIP TO PURLIN WITH UP TO 4" THICK INSULATION
- SAVE PLATE TO PURLIN
- BOBB CLOSURE TO SAVE PLATE OR EAVE STRUT
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS - MSCSTC ROOF

1/4 - 14 X 1"

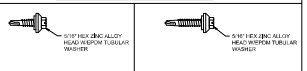
- MSCSTC CLIP TO PURLIN GREATER THAN 4" THICK INSULATION BUT LESS THAN 8"
- SAVE PLATE TO PURLIN
- BOBB CLOSURE TO SAVE PLATE OR EAVE STRUT
- SUPPORT PLATE TO PURLINS AT HIP OR VALLEY CONDITIONS - MSCSTC ROOF

1/4 - 14 X 1 1/2"

- MSCSTC RAKE SUPPORT TO RAKE ANGLE
- FLOATING EAVE PLATE TO EAVE STRUT
- FLOATING EAVE PLATE TO JOIST

1/4 - 14 X 1 1/4" SHOULDER

#1/4"-14 WT Fasteners



- ROOF PANEL TO ROOF PANEL
- TRIM TO ROOF PANEL OR CLOSURES
- ROOF CAP OR FLASHING TO CLOSURES

1/4 - 14 X 7/8" WT

- ROOF PANEL TO STEEL
- BACKUP PANEL TO STEEL
- ROOF TRIM TO STEEL

1/4 - 14 X 1 1/4" WT

Wood Fasteners

- STANDING SEAM ROOF CLIP TO WOOD
- PANEL TO WOOD
- TRIM TO WOOD

#14 X 1 1/2" TYPE A MILLED POINT

- STANDING SEAM ROOF AT EAVE TO WOOD
- CS ROOF TO WOOD
- TRIM ON ROOF TO WOOD

1/4 - 14 X 1 1/2" WT TYPE AB MILLED POINT

- MVF/MVP CLIP TO WOOD
- MVF/MVP CLIP ALTERNATE FASTENER TO WOOD
- RAKE AND CORNER ANGLE TO WOOD
- PARAPET CAP CLEAT TO WOOD

#12 - 8 X 1" XG PANCAKE HEAD

- MVF/MVP UTILITY CLIP TO WOOD
- MVF/MVP CLIP ALTERNATE FASTENER TO WOOD
- RAKE AND CORNER ANGLE TO WOOD
- PARAPET CAP CLEAT TO WOOD

#12 - 8 X 2" XG PANCAKE HEAD

Tamperproof

- PANEL TO STEEL
- TRIM TO STEEL

#12 - 14 X 1 1/4" TAMPERPROOF

- PANEL TO STEEL
- TRIM TO STEEL

#12 - 14 X 2" TAMPERPROOF

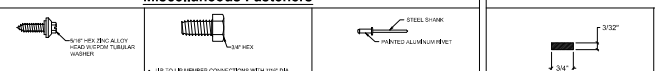
- PANEL TO STEEL GREATER THAN 12 GAGE
- TRIM TO STEEL GREATER THAN 12 GAGE

#12 - 24 X 1 1/2" TORX DRIVE

- TRIM TO TRIM
- TRIM TO PANEL
- PANEL TO PANEL

1/4 - 14 X 7/8" TAMPERPROOF

Miscellaneous Fasteners



- "STRIP OUT" REPLACEMENT FASTENER FOR ROOF, WALLS, BACKUP PANEL AND TRIM

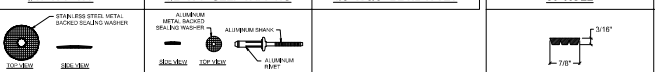
#17 X 1" WT

- PUNCHED HOLES

1/2" X 1" SELF-TAPPING

- TRIM TO TRIM
- TRIM TO STEEL
- MSCSTC & MVF/MVP OUTSIDE CLOSURE TO BACKUP AKALL AT HIP CONDITION

1/8" X 3/8" BLIND RIVET



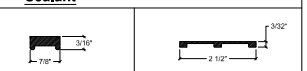
- MSCSTC-LOW SIDE OF LIGHT TRANSMITTING PANELS

#14 X 1 1/8" BONDED WASHER

- LIGHT TRANSMITTING PANEL TO LIGHT TRANSMITTING PANEL - SIDE LAP
- HINGOING BY CHIEF TO WOOD/LJAMBS

3/16" BULBTITE RIVET AND WASHER

Sealant



TAPE MASTIC 50' ROLL

DOUBLE BEAD TAPE MASTIC 40' ROLL

TRIPLE BEAD TAPE MASTIC 20' ROLL

TRI-BEAD TAPE MASTIC 35' ROLL / PRE-CUT

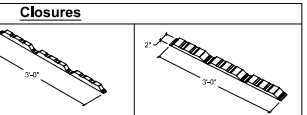
- POLYURETHANE SEALANT.
- USED AT EXPOSED AREAS OR AREAS WHERE SOME PULL-THROUGH IS.
- THIS SEALANT IS U.V. RESISTANT.
- SEALS 24-2 LINEAR FEET OF 1/4" BEAD

201 SIKAFLEX

- NON-SHRINKING, NON-SAGGING SEALANT.
- USED AT TRIM CAP LAPS, VERTICAL CHANGE LAPS, GABLE TRIM LAPS, AND GUTTER LAPS.
- THIS SEALANT IS NOT U.V. RESISTANT.
- USED AT NON-EXPOSED AREAS.
- SEALS 24-3 LINEAR FEET OF 1/4" BEAD

511 SIKALASTOMER

Closures

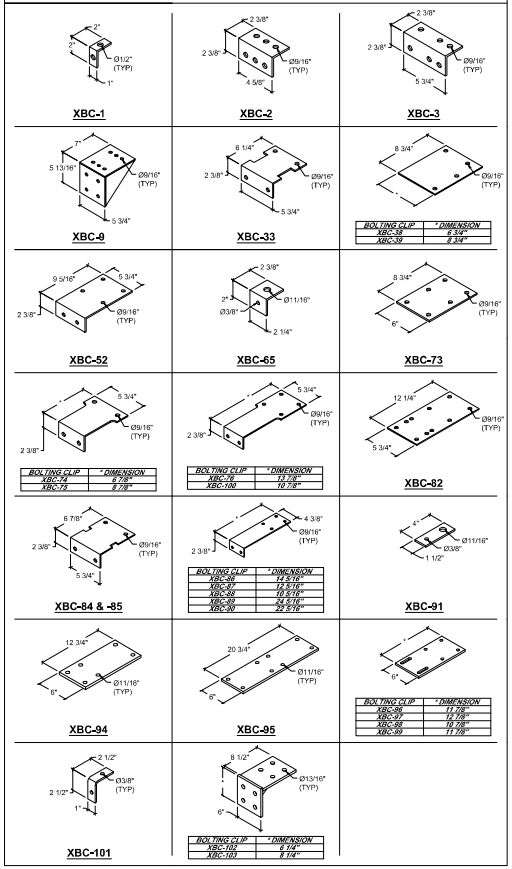


INSIDE CS CLOSURE OUTSIDE AP CLOSURE

INSIDE AP CLOSURE OUTSIDE CS CLOSURE

2" OUTSIDE CS HEIGHT CHANGE FOAM CLOSURE

Bolting Clips (XBC)



BOLTING CLIP	* DIMENSION
XBC-73	5 3/4"
XBC-74	8 3/4"

BOLTING CLIP	* DIMENSION
XBC-76	13 7/8"
XBC-100	10 7/8"

BOLTING CLIP	* DIMENSION
XBC-75	8 7/8"
XBC-77	12 5/16"
XBC-78	10 5/16"
XBC-99	24 5/16"
XBC-30	22 5/16"

BOLTING CLIP	* DIMENSION
XBC-96	11 7/8"
XBC-97	12 7/8"
XBC-98	10 7/8"
XBC-39	11 7/8"

BOLTING CLIP	* DIMENSION
XBC-102	6 1/4"
XBC-103	9 1/4"

XBC-1 **XBC-2** **XBC-3**

XBC-6 **XBC-33**

XBC-52 **XBC-65**

XBC-82

XBC-84 & -85

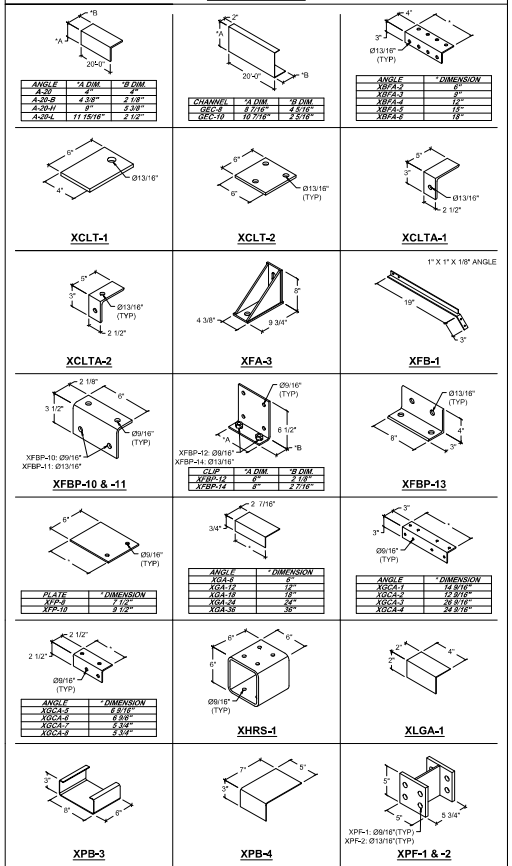
XBC-91

XBC-94 **XBC-95**

XBC-101

TO BE USED FOR CONSTRUCTION

Miscellaneous



ANGLE	*A DIM.	*B DIM.
A-36	3"	4"
A-20-B	4 3/8"	2 1/8"
A-30-H	3"	5 3/8"
A-20-L	11 15/16"	2 1/2"

CHANNEL	*A DIM.	*B DIM.
GEC-1	6 7/16"	4 5/16"
GEC-10	10 7/16"	2 5/16"

ANGLE	* DIMENSION
XBFA-3	6"
XBFA-3	9"
XBFA-4	12"
XBFA-5	15"
XBFA-6	18"

XCLT-1 **XCLT-2** **XCLTA-1**

XCLTA-2 **XFA-3** **XFB-1**

CLIP	*A DIM.	*B DIM.
XFBP-13	6"	2 1/8"
XFBP-14	8"	2 7/16"

XFBP-10 & -11 **XFBP-13**

PLATE	* DIMENSION
XFP-1	7 1/2"
XFP-10	9 1/2"

ANGLE	* DIMENSION
XGA-6	6"
XGA-12	12"
XGA-18	18"
XGA-24	24"
XGA-36	36"

ANGLE	* DIMENSION
XGCA-1	14 9/16"
XGCA-2	12 9/16"
XGCA-3	26 9/16"
XGCA-4	24 9/16"

ANGLE	* DIMENSION
XGCA-5	8 5/16"
XGCA-6	6 9/16"
XGCA-7	5 3/4"
XGCA-8	3 3/4"

XHRS-1 **XLGA-1**

XPB-3 **XPB-4** **XPF-1 & -2**

XPF-1: Ø9/16"(TYP)
XPF-2: Ø13/16"(TYP)

XSST-1

Note: This drawing is not sealed/signed by engineer as it does not contain project specific information thus is not considered a "technical submission".

RELEASED	1-22-25
SUPERSEDES	12-20-24

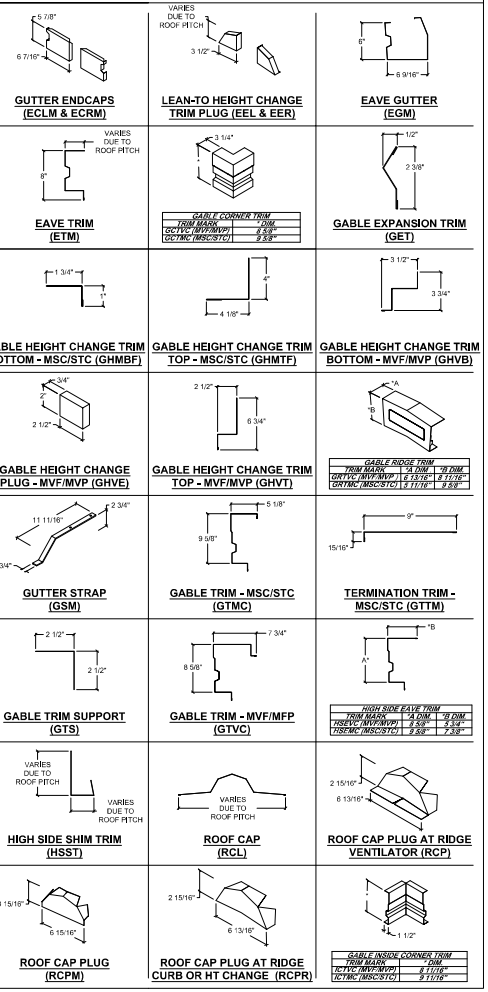
Drawing	STANDARD PARTS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

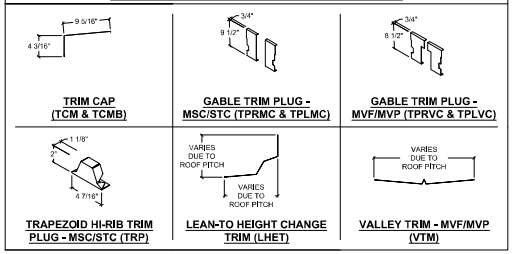
DRAWN	CHECK	ORDER NO.	SP1
KAL/BD	ALI	B3025326	
2/11/25	3/6/25		SP2

Commonly Used Parts: Not all parts shown will be required on all projects.

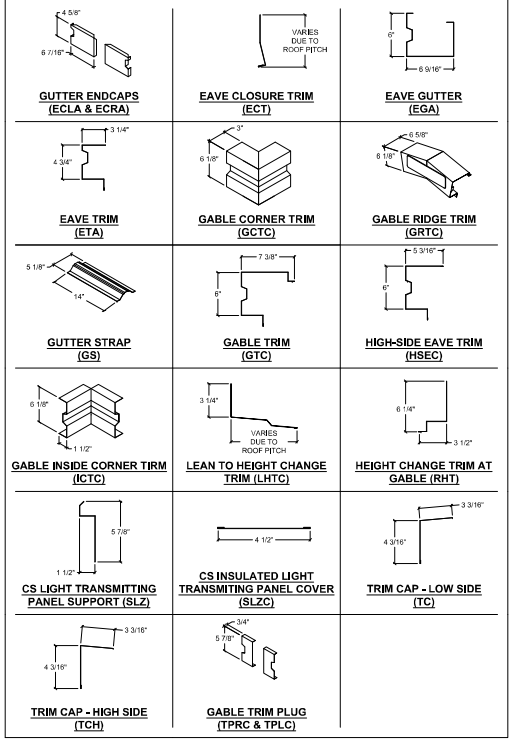
Standing Seam Roof Panel Trim



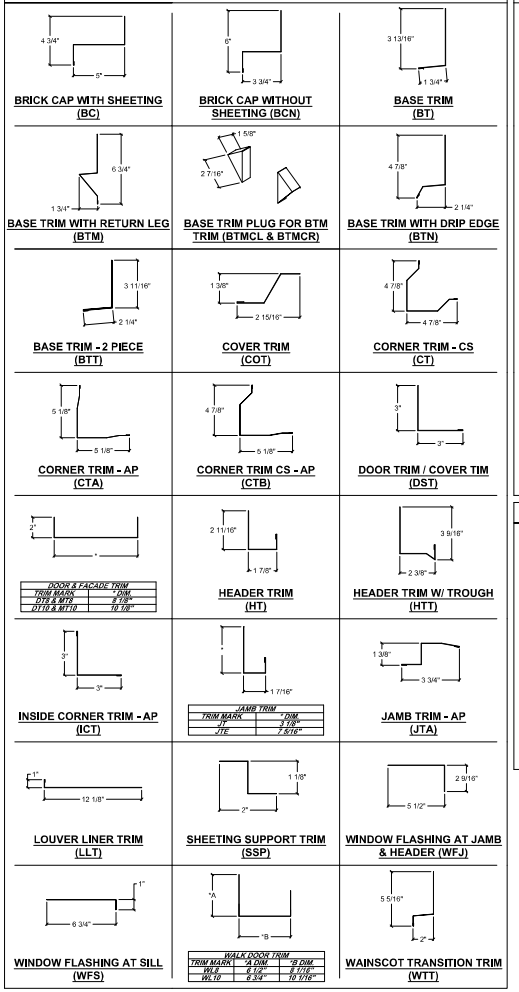
Standing Seam Roof Panel Trim Continued



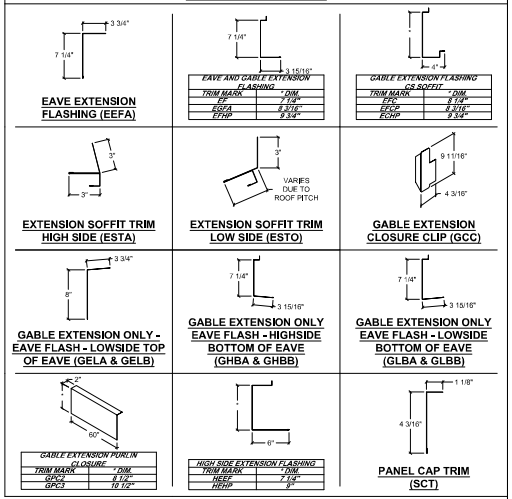
CS Roof Panel Trim



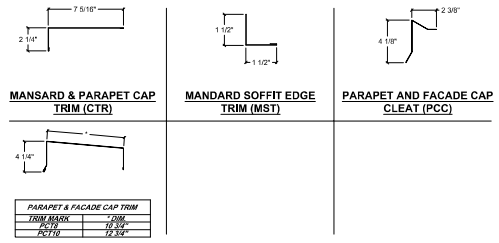
AP / CS Wall Panel Trim



Roof Extension Trim



Parapet & Facade Trim



TO BE USED FOR CONSTRUCTION

Note: This drawing is not sealed/signed by engineer as it does not contain project specific information thus is not considered a "technical submission".

RELEASED	12-20-24
SUPERSEDES	08-21-24

Drawing	STANDARD PARTS
Buyer	Triangle Home Pros, LLC
Customer	Martinez Commercial Properties, LLC Fuquay Varina, NC 27526
Project Name	E & M Concrete

CHIEF BUILDINGS

DRAWN	CHECK	ORDER NO.	SP2
KAL/BD	ALI	B3025326	
2/11/25	3/6/25		SP2

Project Name: E & M Concrete
Project Address: 308 Jarco Drive, Fuquay-Varina, NC 27526
Chief Order No.: B3025326
Date: 8/28/25
Rev.: 0

APPENDIX B

EOR Approval Letter

Harris Structural Design, PA
3206 Heritage Trade Dr. Wake Forest, NC 27587 (919)556-6032 thomas-hsd@nc.rr.com

August 21, 2025

To: Inspection Department

Concerning: E&M Concrete
Fuquay Varina, NC

The anchor bolt projection was slightly less than required on column EC-7 on Frame Line 6. 3 of the 4 anchor bolts for this column do not have full engagement of the nut. See the (2) pictures below. Use a puddle weld for the (3) anchor bolts to reinforce the connection of the top of the bolt to the nut.

If there are any further concerns or questions do not hesitate to call.

Thomas B. Harris, PE

NORTH CAROLINA PROFESSIONAL SEAL 029465 ENGINEER THOMAS B. HARRIS

Sealed 8-21-25

APPENDIX C

Photos

(E&M Concrete_001.JPG)

(E&M Concrete_002.JPG)

(E&M Concrete_003.JPG)

(E&M Concrete_004.JPG)

(E&M Concrete_005.JPG)

(E&M Concrete_006.JPG)

(E&M Concrete_007.JPG)

(E&M Concrete_008.JPG)

(E&M Concrete_009.JPG)

(E&M Concrete_010.JPG)

(E&M Concrete_011.JPG)

(E&M Concrete_012.JPG)

(E&M Concrete_013.JPG)

(E&M Concrete_014.JPG)

(E&M Concrete_015.JPG)

(E&M Concrete_016.JPG)

(E&M Concrete_017.JPG)

(E&M Concrete_018.JPG)

(E&M Concrete_019.JPG)

(E&M Concrete_020.JPG)

(E&M Concrete_021.JPG)

(E&M Concrete_022.JPG)

(E&M Concrete_023.JPG)

(E&M Concrete_024.JPG)

(E&M Concrete_025.JPG)

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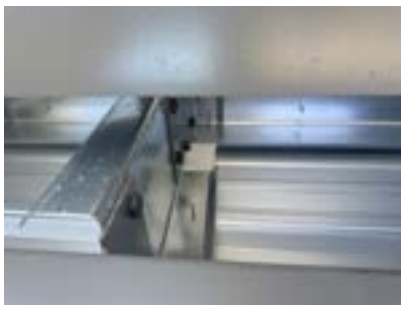
(E&M Concrete_027.JPG)



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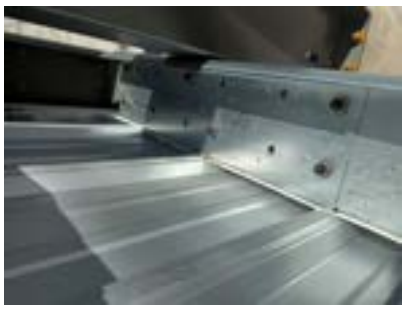

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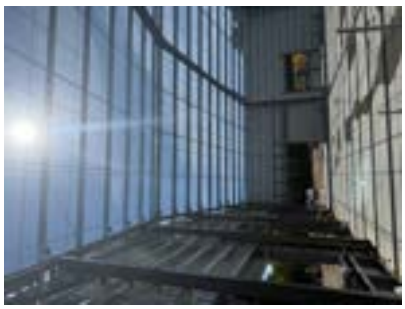

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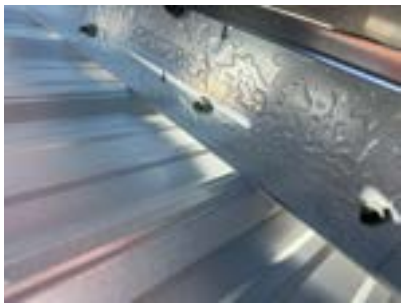

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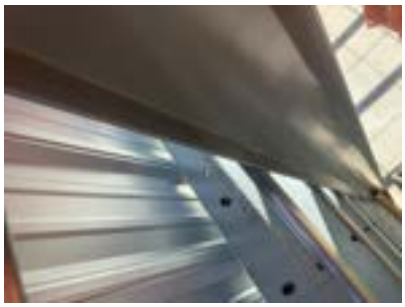

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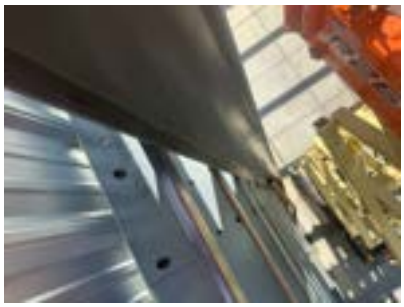

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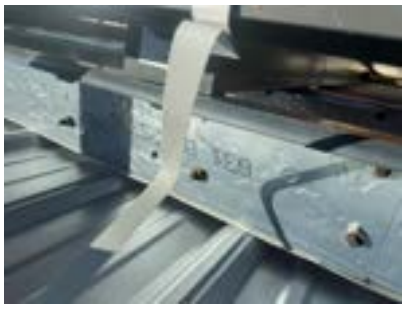

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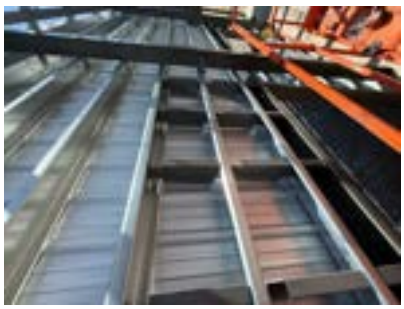

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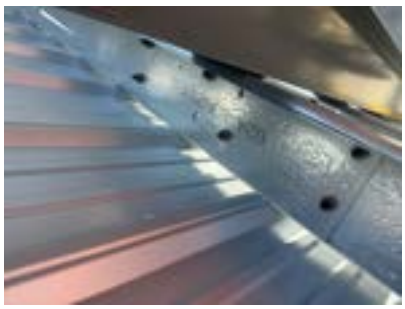

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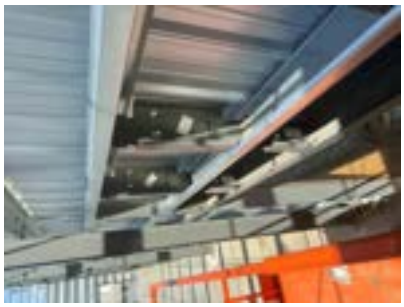

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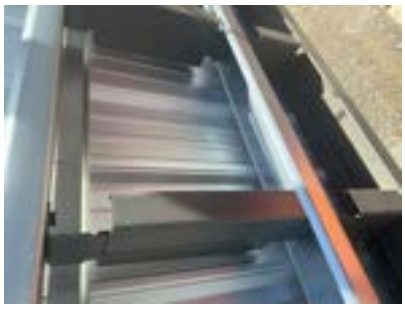

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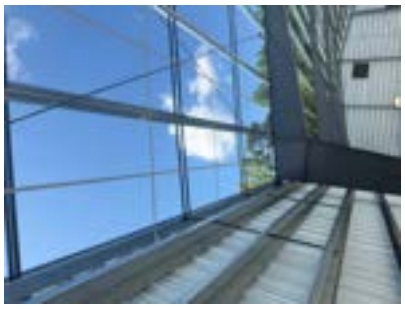

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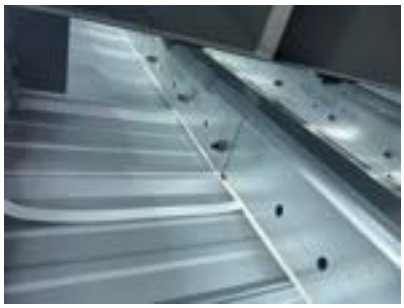

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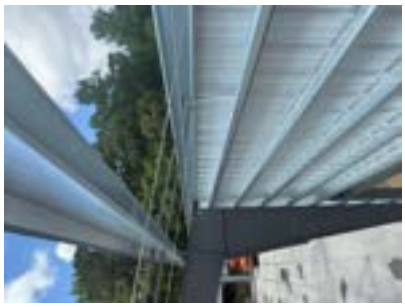

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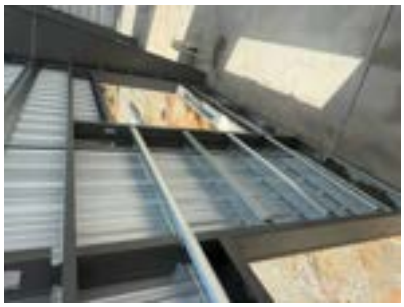

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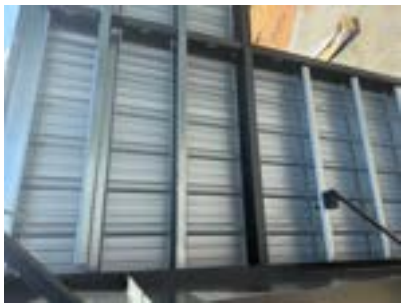

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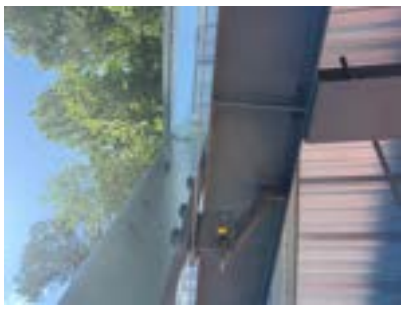

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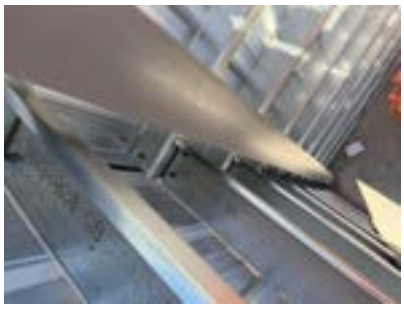

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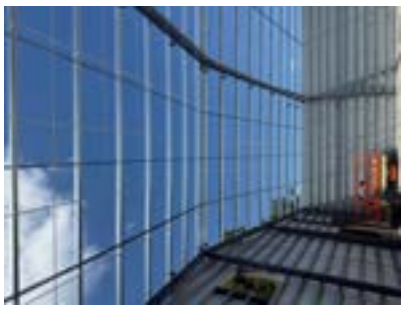

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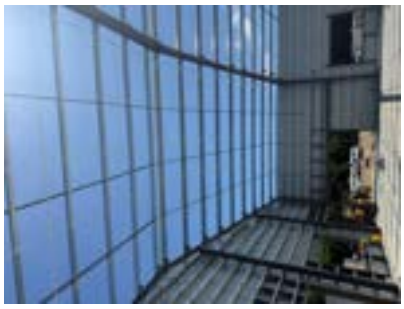

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