

General Specifications for

Golden Giant Building Systems

13300 S. Vision Dr.

P.O. Box 389

Kenton, Ohio 43326

PH: 1.800.828.1209

General Specifications

1. **Building Type:** The Pre-Engineered Building shown shall be a single story, single or multiple span, utilizing solid web steel rigid frame or level chord primary frames. Secondary framing shall be “Cee” or “Zee” sections G-40 Acrylic Coated Galvanized and Cold Formed as described in section 4 and 5. Exterior roof and wall covering shall be Golden Giant Industrial Steel Ribbed Panels.
2. **Design Considerations:** The structure shall be designed to satisfy local requirements for snow loads, collateral loads and wind loads.

Design shall be in accordance with, but not limited to, the following publications:

- International Building Code and/or State Building Codes
- American Society of Civil Engineers
- Metal Building Manufacturers Association Low Rise Building Systems
- American Institute of Steel Construction Manual
- American Iron and Steel Institute – North American Specification for the Design of Cold Formed Steel Structural Members
- Steel Tube Institute of North America – Hollow Structural Sections
- American Welding Society Standard Code for Arc and Gas Welding in Building Construction
- Design software utilized by Golden Giant Building Systems is Metal Building Software (MBS)

3. **Primary Frames:** The primary frames (trusses) shall be of the solid web variety fabricated from ASTM A570/A572 – grade 50 sheet/plate webbing and ASTM A529 grade 55 HR flats/flanges.

Hot rolled structural shapes comply with the requirements of ASTM A992/A572 Grade 50. Members fabricated from plate or bar stock to be minimum yield strength complying with Grade 50 or Grade 55.

All welded joints shall be in accordance with AWS Specifications.

4. **Secondary Framing:** All members used for secondary framing shall be cold formed from G-40 Acrylic Coated Galvanized Material complying with ASTM A653-06 and no less than 16 ga. thickness. These members include, but are not limited to, purlins, eave struts, girts, base angle, framed openings, legs, sills, headers, rakes, sheeting angles and roll bracings.

The G-40 Acrylic Coated Galvanized coating on these materials shall be a baked on 0.5mil clear acrylic coating over G-40 hot dipped galvanized substrate of hot rolled steel. Accelerated weathering condition test results to be as follows:

5% Salt spray per ASTM B-117-85:	144 HRS.
Water immersion, per ASTM D-870-54 (1980):	500 HRS.
Weather-O-Meter, per ASTM D-822-80/G23-81:	125 HRS.
Humidity, per ASTM D-2247-68 (1980):	500 HRS.

End wall frames shall be fabricated from cold formed sections and/or hot rolled W shape sections or build-up fabricated I-beams,

depending on specific requirements. Girt and purlin brackets to be pre-located on all Load-Bearing Members.

5. **Shop Painting:** All primary frames and column shall be given one coat of gray oxide primer, and when tested in accordance with ASTM B117, 5% salt solution, results at 500 hours to be:

Blistering	None
Creep from scribe	Less than 1/8 inch
Rusting	Light rust at scribe only

6. **Roof Covering:** Standard roof covering materials to be Golden Giant 26 Ga. High Rib Industrial Steel Panels. This panel is typical to the Metal Building Industry, having a 36” net coverage with 1 ¼” deep ribs on 12” centers. Unless a color is specified, standard finish shall be acrylic galvalume, a patented sheet steel product having a coating of corrosion-resistant Aluminum-Zinc Alloy applied by continuous hot dipping process, as manufactured by Bethlehem Steel Corporation, and described in ASTM Specification A792 AZ-55 coating thickness. If a color is specified a silicone polyester baked on finish called PPG/BASF Superl II Ultra Cool will be applied over the galvalume substrate.

The optional roof covering material is the Golden Giant “SSRII” concealed fastener standing seam roof system. The panels for the system have an 18” wide configuration with 2 ½” deep high ribs to each edge of the panel, cold formed from 24 ga. acrylic galvalume with a coating weight of AZ-55.

Panels are secured to the secondary framing by a means of a steel clip placed between the side laps at each purlin. The panels are joined together at the side lap by means of mechanically seaming the laps which become an integral part of the panel.

7. **Wall Coverings:** Wall panels are available in a number of different colors. The coating on the wall panels shall be silicone polyester baked on finish called PPG/BASF Superl II Ultra Cool and applied over the galvalume substrate.
8. **Translucent Panels:** Translucent Panels are available in the same configuration as the Industrial Panel. They are white in color weighing no less than 8 oz. per sq. ft. and composed of glass fiber reinforced plastic and comply with the requirements of ASTM D6181-61 Procedure A. They may be used for roof or wall applications.
9. **Roof Tape:** Mastic sealant is to be provided for all roof applications lower than 3:12 roof pitch. The mastic shall be a Butyl Rubber based extruded sealant, 7/8" wide x 3/16" thick, packaged on silicone release paper. Mastic is applied on Industrial Rib applications at all side-laps, all end-laps, ridge caps and at rake flashings. For Standing Seam Roof Systems, there is no mastic applied at side-laps, since the batten strips are provided with factory applied sealant.

10. **Closures:** Closed Cell EPDM Synthetic rubber flexible closure strips, pre-modeled to match the configuration of the Industrial Panel, shall be provided where necessary to ensure weather tight construction.

11. **Trim:** All trim sections shall be fabricated from sheet steel having a minimum thickness of 26 ga. and having a finish as described for the colored wall panels. Color availability shall be the same as panel color selections.

Trim is provided in all areas necessary to provide a complete finished building. Eave trim or gutter shall be fabricated to match the rake trim when the corner caps are installed. Trim will be provided for all door and window openings, corners, eaves, rakes, overhangs, and any other places required for the specific project.

12. **Diagonal Bracing and Roll Bracing:** Diagonal bracing shall be provided when necessary to meet design load considerations when panel shear is not applicable. Bracing material will be a min. 1/4" dia. 1 x 7 EHS strand cable complying with ASTM A475. Roll bracing for purlins is required for standing seam roof applications. Roll bracing members are cold formed channels field attached to purlins.

13. **Threaded Fasteners:** All fabricated primary frame sections shall be field bolted together using ASTM A325 bolt tightening specifications on the construction drawings. Secondary framing members shall be bolted together using ASTM A307 bolts. Base angle and framed opening legs

shall be secured to the foundation using expansion type wedge anchors supplied with the Building Package. Anchor bolts which are shown on the plans are not provided unless stated otherwise.

Galvalume colored roof or wall sheets shall be secured to the secondary framing with stainless steel self drilling, self tapping fasteners commonly known as Tek Screws. The Tek Screws for roof applications shall be “SCOTS” capped S.S. Teks as manufactured by ITW Buildex.

To match wall color, a vinyl topcoat finish shall be applied to the heads of Teks used with colored panels. Tek Screws are also used to secure brackets used when assembling framed openings.

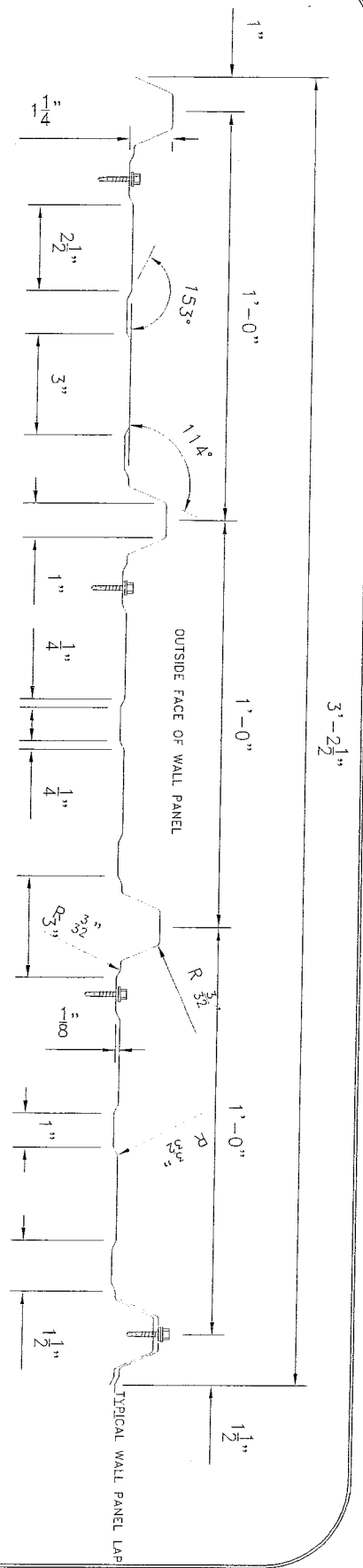
14. Service Doors and Frames: Steel doors comply with the requirements of Steel Door Institutes “Recommended Specifications for Standard Steel Doors and Frames.” Hardware preparation complies with ANSI A115 “Specifications for Door and Frame Preparation for Hardware.” All standard steel doors and frames are prehung, prefinished baked on paint finish over galvanized doors and frames. Doors and frames are thermally broken. Two colors are available – white and brown. All standard door hardware is factory installed. Re: Ada lockset, latch guard, closer, weather stripping and Ada threshold. Latching devices may be provided as required by local building code.

15. Insulation (if part of bid): Shall be supplied by GBP/Silvercote, specifications of WMP-VRR-Plus. A local supplier can be used if a product of equal specifications is available.

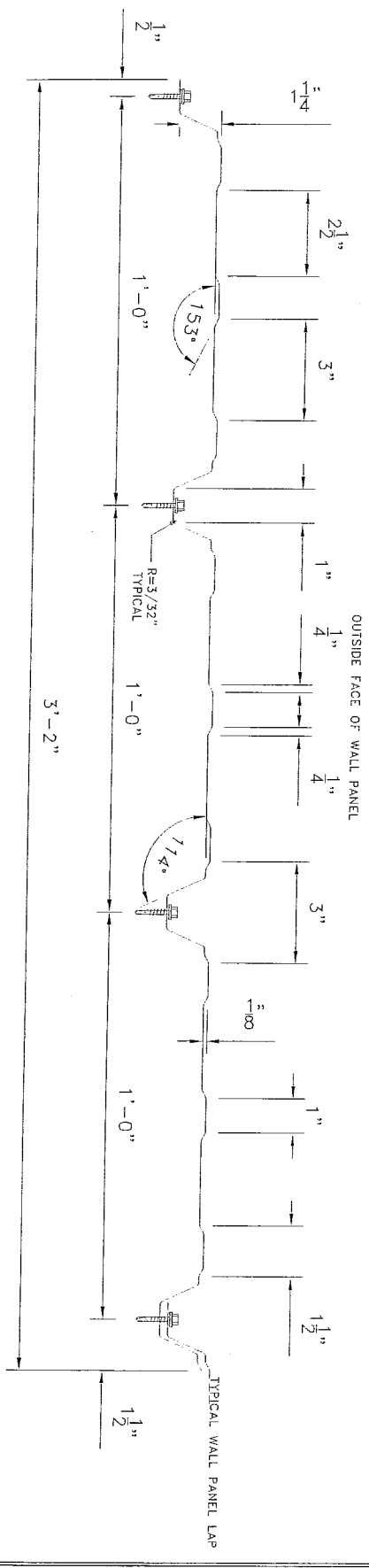
Golden Giant, Inc. buildings continue to meet or exceed Code requirements for the State of Ohio and the other states we operate in. Golden Giant, Inc.'s quality standards & testing include:

- Buildings that have passed the most stringent test for building designed to be built in the hurricane zones of the United States (professionally referred to as HVHZ Zone Testing in Florida). Our mechanical roof assemblies have been qualified under the ASTM E 1592 (2001), FM 4471 App. G (1995), TAS 125 (2003), TAS 201 (1994).
- As a part of our HVHZ requirements we are required to have a third party quality testing partner (Keystone Certifications, Inc.).
- Golden Giant, Inc. utilizes the services of Farabaugh Engineering and Testing, Inc., an IAS approved inspection agency, to insure its compliance with the IAS AC472.
- Golden Giant, Inc. only employs AWS Certified Welders for welding positions.
- Golden Giant, Inc. utilizes MBS (Metal Building Software) as our design software. CAD 09 and Revit 09 for renderings, floor plans and elevations.

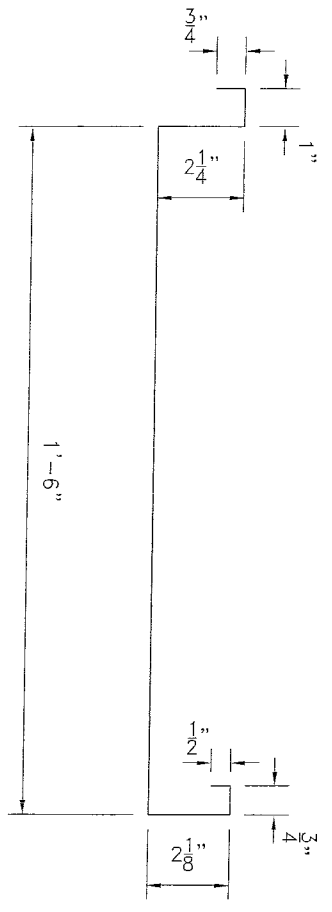
- Golden Giant, Inc. directly employs the Engineers and Drafts-people who will be designing and drawing your building.
- Golden Giant, Inc. is a member of MBMA.
- “Up Lift Loading Base Test” performed by Virginia Tech.
- “Gravity Loading Base Test” performed by Virginia Tech.
- In process of becoming IAS AC472 Certified



GOLDEN GIANT RIB PANEL



GOLDEN GIANT REVERSE RIB PANEL



GOLDEN GIANT STANDING SEAM PANEL

WALL & ROOF PANEL PROFILES



13300 S. Vision Drive
P.O. Box 589
Kenton, OH 43326
www.goldengiant.com

office: 419-674-4038
office: 800-828-1209
fax: 419-673-1384

DATE: 4-2-09
DRAWN BY: MIKE MERMANN
JOB NO.

SHEET

USE (2) 7/8" STALGUARD TEKES AT EACH FLAT OF PANEL TO ATTACH GUTTER TO ROOF PANEL

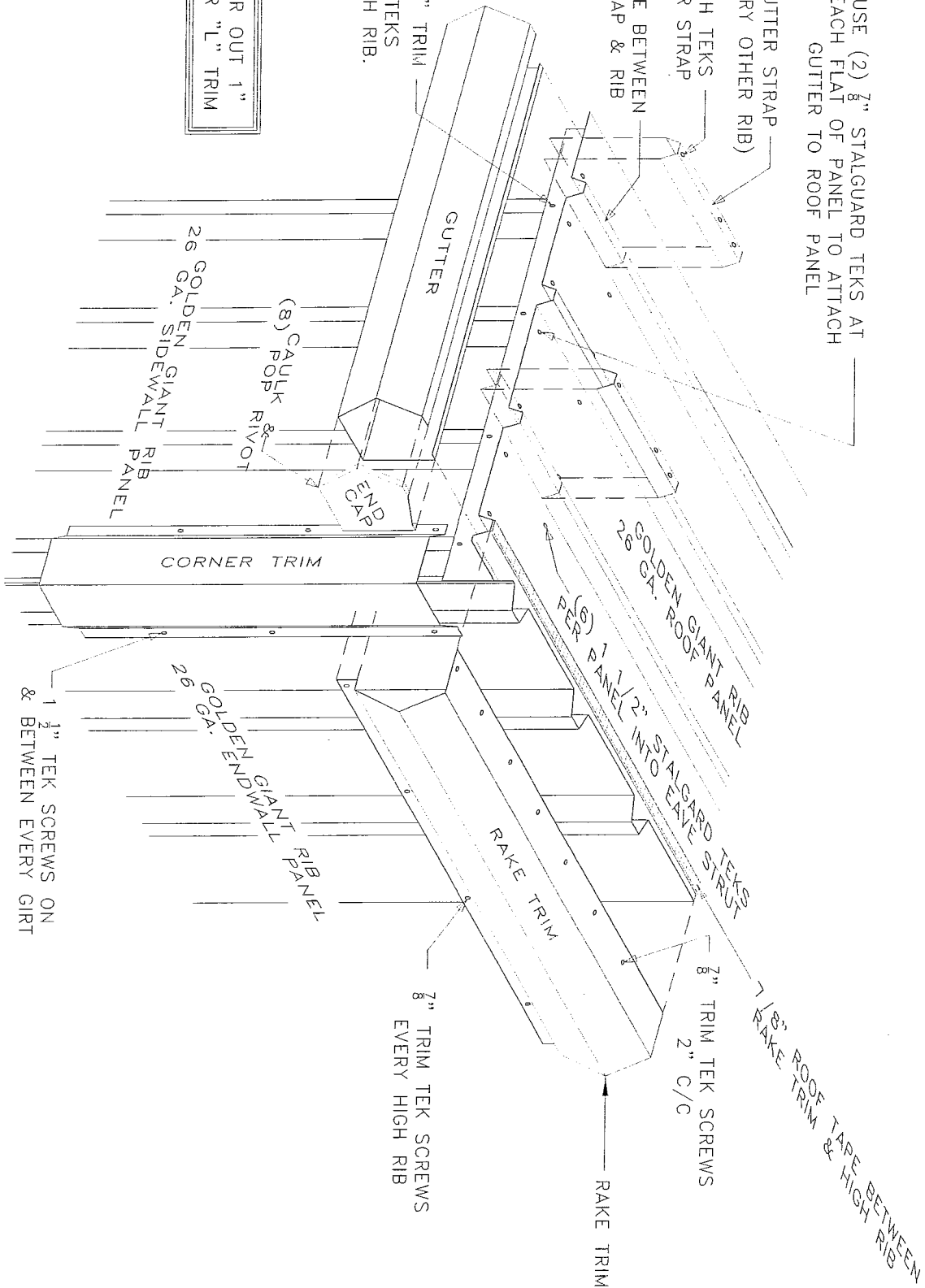
GUTTER STRAP (EVERY OTHER RIB)

(3) 7/8" STITCH TEKES EACH GUTTER STRAP

7/8" ROOF TAPE BETWEEN GUTTER STRAP & RIB

GUTTER "L" TRIM
7/8" TRIM TEKES EVERY HIGH RIB.

HOLD GUTTER OUT 1" FROM GUTTER "L" TRIM



GUTTER & RAKE FINISHING DETAIL (G3)

GUTTER & RAKE FINISHING DETAIL

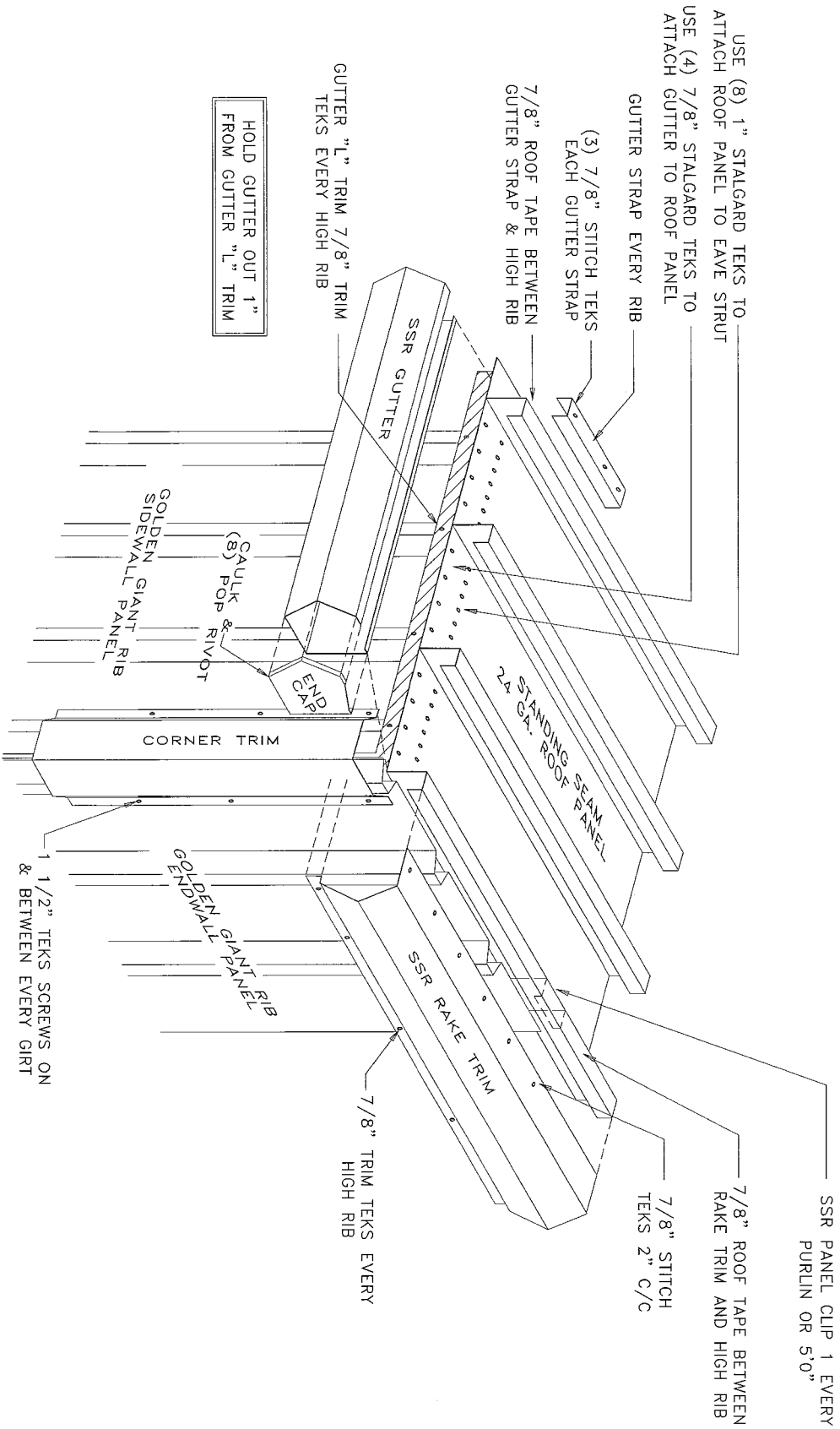


13300 S. Vision Drive
P.O. Box 389
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www.goldengiant.com

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JOB NO.

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SSR CORNER & START DETAIL (SS8)

*REVISED 3-1-04

GUTTER & RAKE FINISHING DETAIL

(STANDING SEAM ROOF)

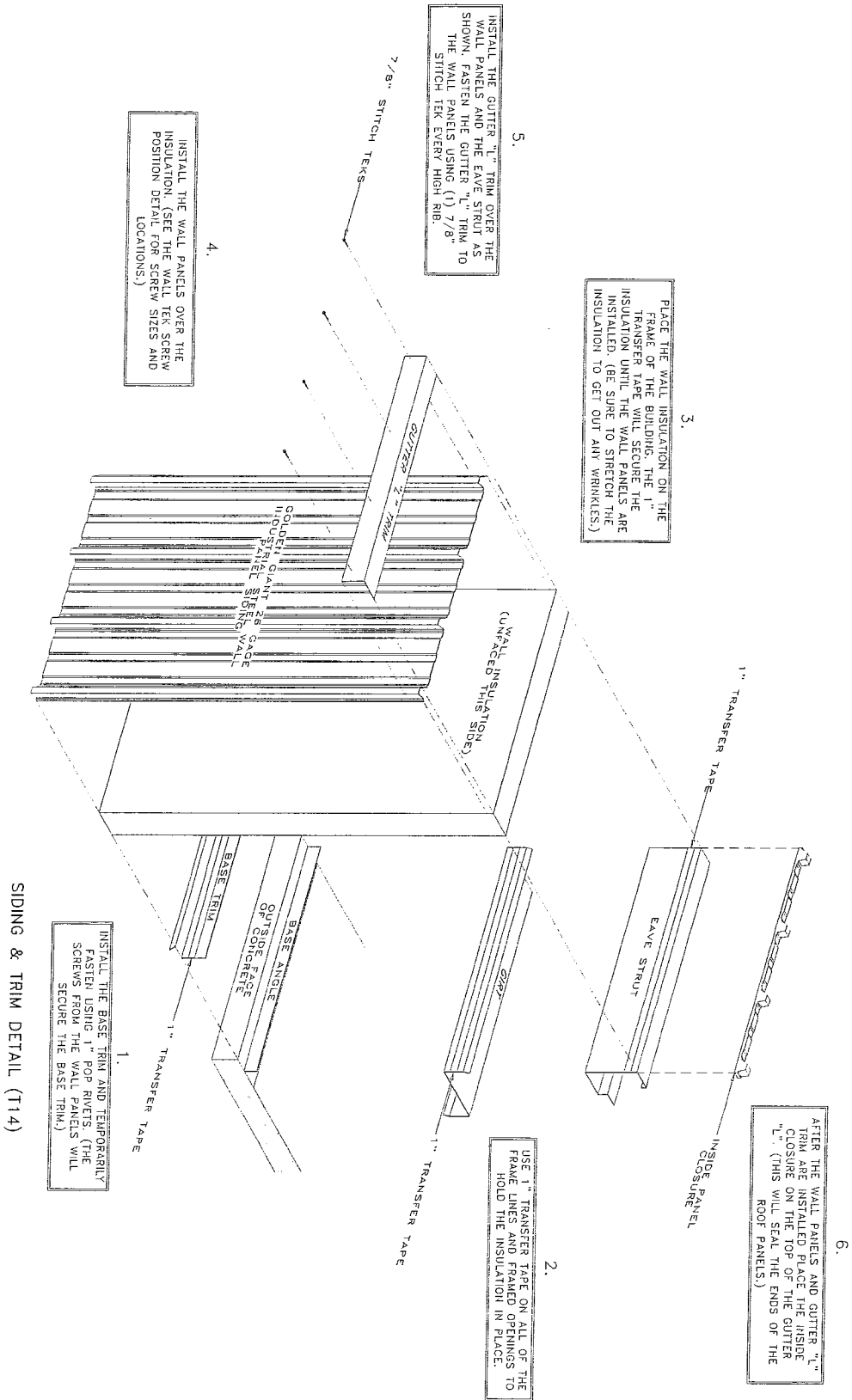
GOLDEN BUILDING SYSTEMS
Spanning the Gap

13300 S. Vision Drive
P.O. Box 389
Kenton, OH 45326
www.goldengiant.com

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3. PLACE THE WALL INSULATION ON THE FRAME OF THE BUILDING. THE 1" TRANSFER TAPE WILL SECURE THE INSULATION UNTIL THE WALL PANELS ARE INSTALLED. (BE SURE TO STRETCH THE INSULATION TO GET OUT ANY WRINKLES.)

5.

INSTALL THE GUTTER "L" TRIM OVER THE WALL PANELS AND THE EAVE STRUT AS SHOWN. FASTEN THE GUTTER "L" TRIM TO THE WALL PANELS USING (1) 7/8" STITCH TEK EVERY HIGH RIB.

4.

INSTALL THE WALL PANELS OVER THE INSULATION. (SEE THE WALL TEK SCREW POSITION DETAIL FOR SCREW SIZES AND LOCATIONS.)

6. AFTER THE WALL PANELS AND GUTTER "L" TRIM ARE INSTALLED PLACE THE INSIDE CLOSURE ON THE TOP OF THE GUTTER "L". (THIS WILL SEAL THE ENDS OF THE ROOF PANELS.)

2.

USE 1" TRANSFER TAPE ON ALL OF THE FRAME LINES AND FRAMED OPENINGS TO HOLD THE INSULATION IN PLACE.

1. INSTALL THE BASE TRIM AND TEMPORARILY FASTEN USING 1" POP RIVETS. (THE SCREWS FROM THE WALL PANELS WILL SECURE THE BASE TRIM.)

SIDING & TRIM DETAIL (T14)

SIDING & TRIM DETAIL



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P.O. Box 389
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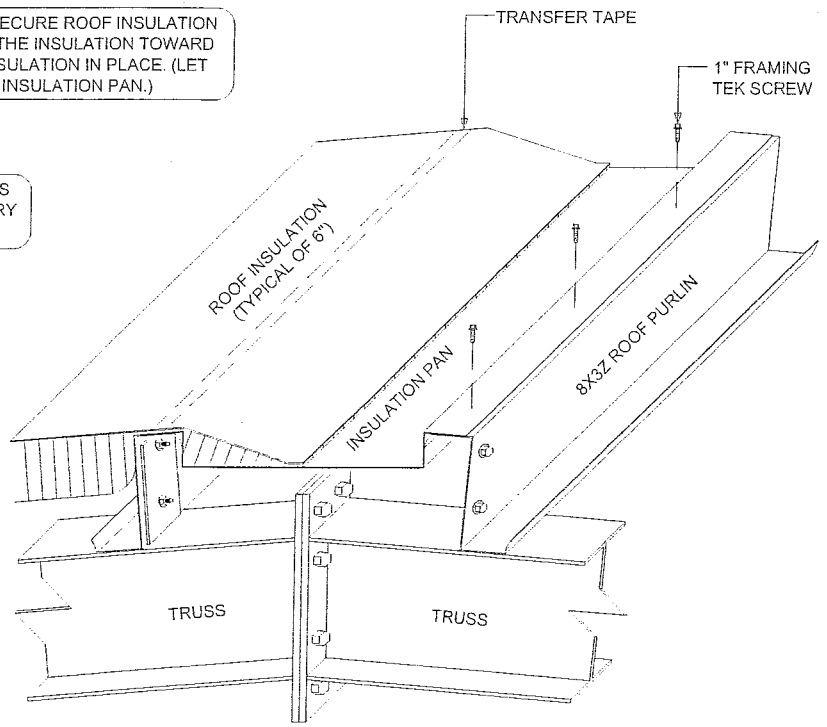
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office: 800-828-1209
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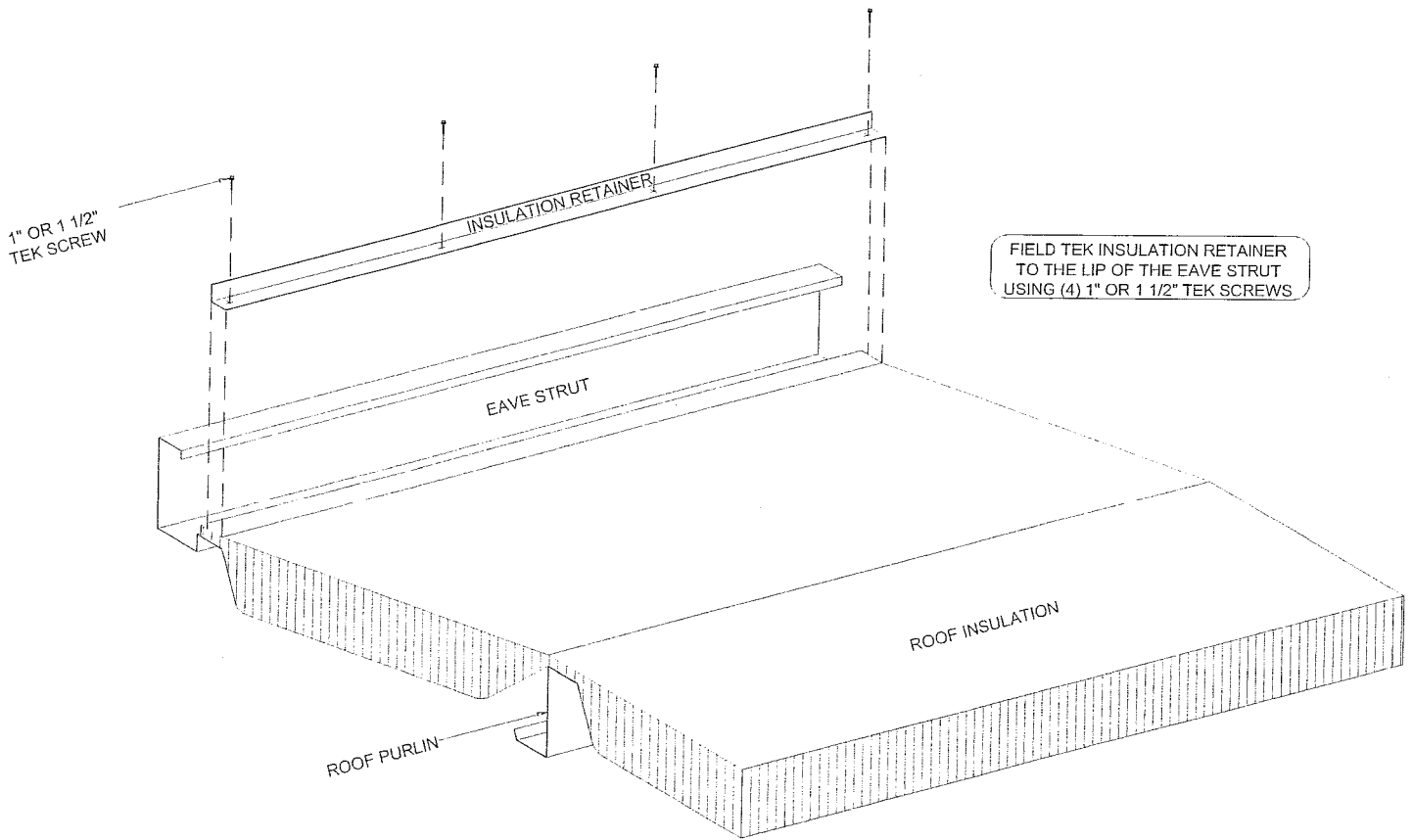
SHEET

USE TRANSFER TAPE ACROSS PEAK PURLINS AND SECURE ROOF INSULATION AT THE EAVE STRUT. THEN PROCEED TO STRETCH THE INSULATION TOWARD THE PEAK. THE TRANSFER TAPE WILL HOLD THE INSULATION IN PLACE. (LET ALL EXCESS INSULATION LAY INSIDE OF THE INSULATION PAN.)

PLACE INSULATION PAN BETWEEN PEAK PURLINS AS SHOWN. USE (1) 1" FRAMING TEK SCREW EVERY 3' C/C THROUGH INS. PAN AND INTO PURLIN.



INSULATION PAN DETAIL



FIELD TEK INSULATION RETAINER TO THE LIP OF THE EAVE STRUT USING (4) 1" OR 1 1/2" TEK SCREWS

INSULATION RETAINER DETAIL

SHEET

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DATE:
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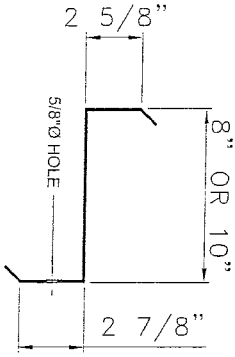


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P.O. Box 389
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INSULATION DETAILS

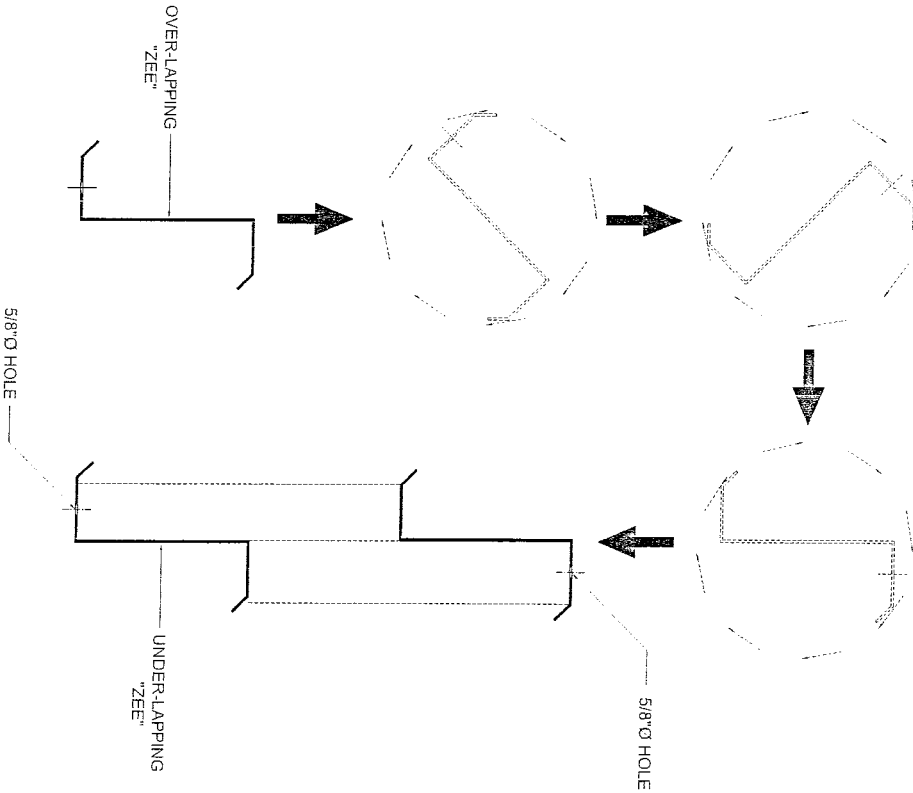
GOLDEN GIANT "ZEE" SHAPED PURLINS & GIRTS ARE FORMED WITH UN-EQUAL FLANGES TO ENSURE PROPER NESTING.



THE 5/8" Ø HOLE MARKS THE 2 7/8" FLANGE FOR A REFERENCE POINT

"ZEE" PROFILE

REFER TO THE "ZEE" PROFILE DETAIL FOR FURTHER INSTRUCTION.



"ZEE" LAP DETAILS

GOLDEN GIANT PURLIN LAP DETAIL

GOLDEN GIANT

SPANNING THE GAP
 601 381
 KENTON, OHIO 43326

REVISIONS		
DATE	BY	DESCRIPTION

FAX: 419/673-1354

PHONE: 419/672-4038

DATE:

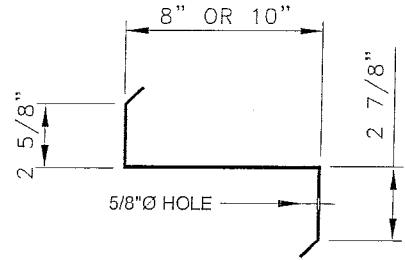
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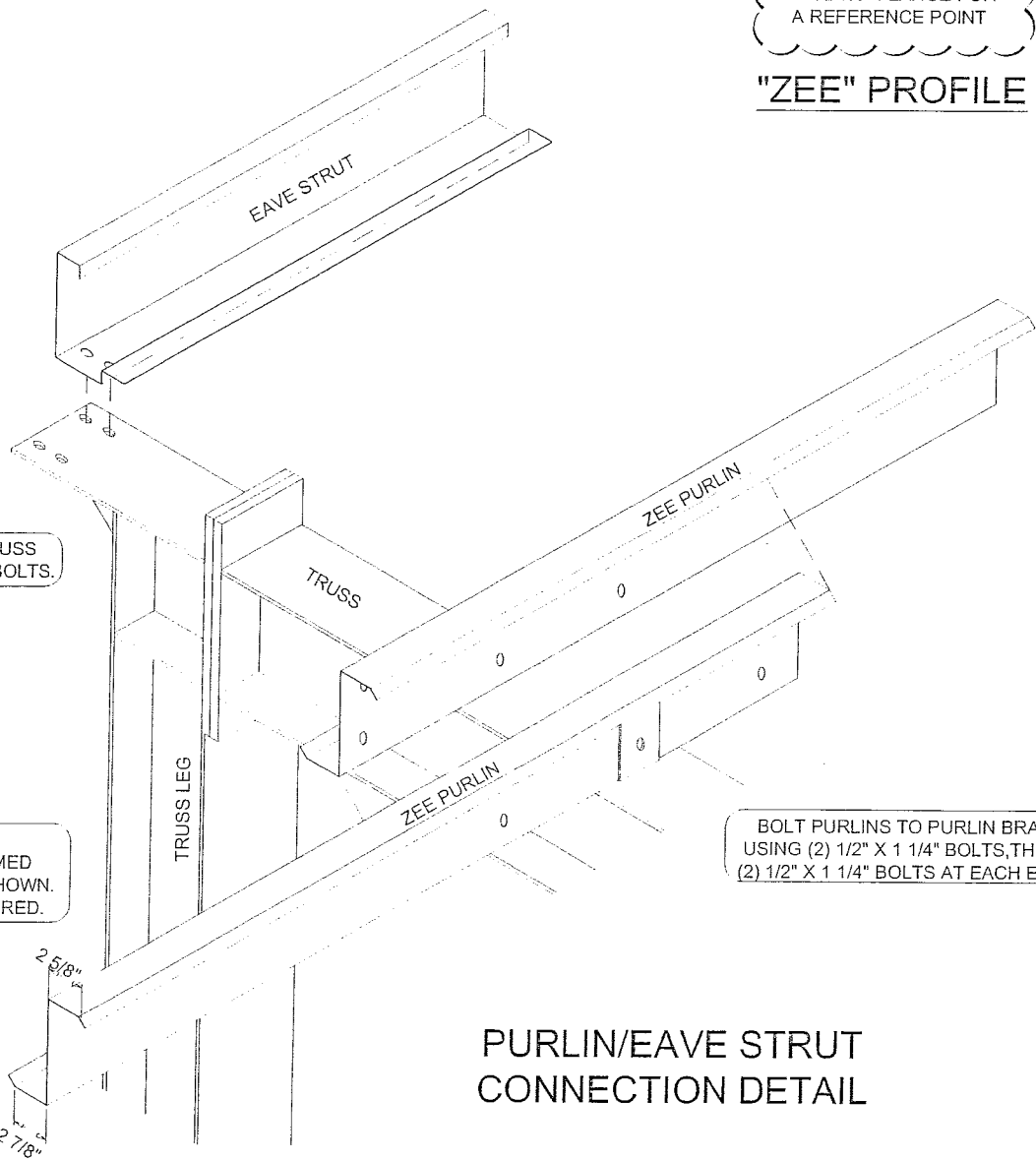
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GOLDEN GIANT "ZEE" SHAPED PURLINS & GIRTS ARE FORMED WITH UNEQUAL FLANGES TO ENSURE PROPER NESTING.



THE 5/8" Ø HOLE MARKS THE 2 7/8" FLANGE FOR A REFERENCE POINT

"ZEE" PROFILE



BOLT EAVE STRUT TO TRUSS LEG USING (2) 1/2" X 1 1/4" BOLTS.

NOTE:
PURLINS ARE ROLL FORMED WITH UNEQUAL LEGS AS SHOWN. FIELD FLIP-FLOP AS REQUIRED.

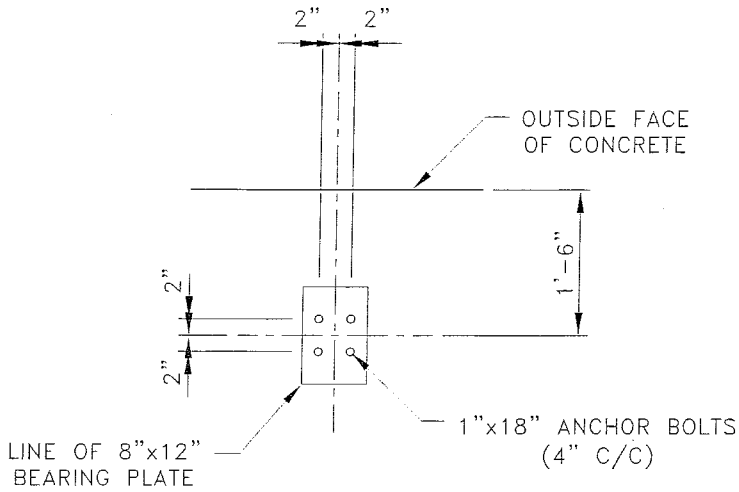
BOLT PURLINS TO PURLIN BRACKET USING (2) 1/2" X 1 1/4" BOLTS, THEN USE (2) 1/2" X 1 1/4" BOLTS AT EACH END LAP.

PURLIN/EAVE STRUT CONNECTION DETAIL

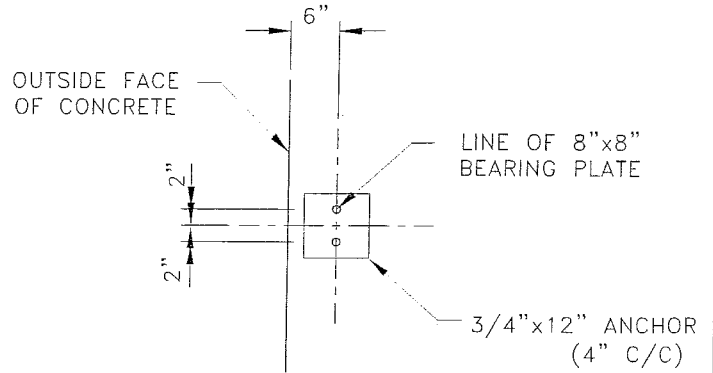
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GOLDEN GIANT
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13300 S. Vision Drive
P.O. Box 389
Kenton, OH 43325
www.goldengiant.com
office: 419-674-4038
office: 800-825-1209
fax: 419-673-1584

**FRAMING
DETAILS**

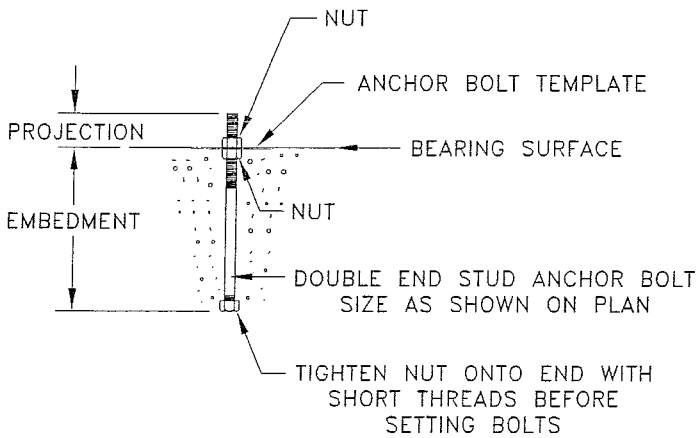


TYPICAL SIDEWALL ANCHOR BOLT SETTING

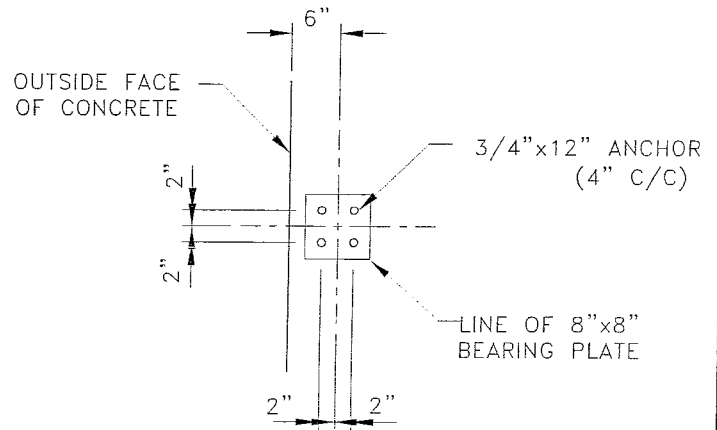


TYPICAL ENDWALL (COLD FORMED) ANCHOR BOLT SETTING

- 1 1/4" ANCHOR BOLTS - 2 1/2" PROJECTION
- 1" ANCHOR BOLTS - 2" PROJECTION
- 3/4" ANCHOR BOLTS - 1 1/2" PROJECTION



TYPICAL BOLT SETTING DETAIL



TYPICAL ENDWALL (MILLED) ANCHOR BOLT SETTING

SHEET

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DRAWN BY:
MIKE MERMANN

DATE:
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P.O. Box 389
Kenton, OH 43326
www.goldengiant.com

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ANCHOR BOLT DETAILS