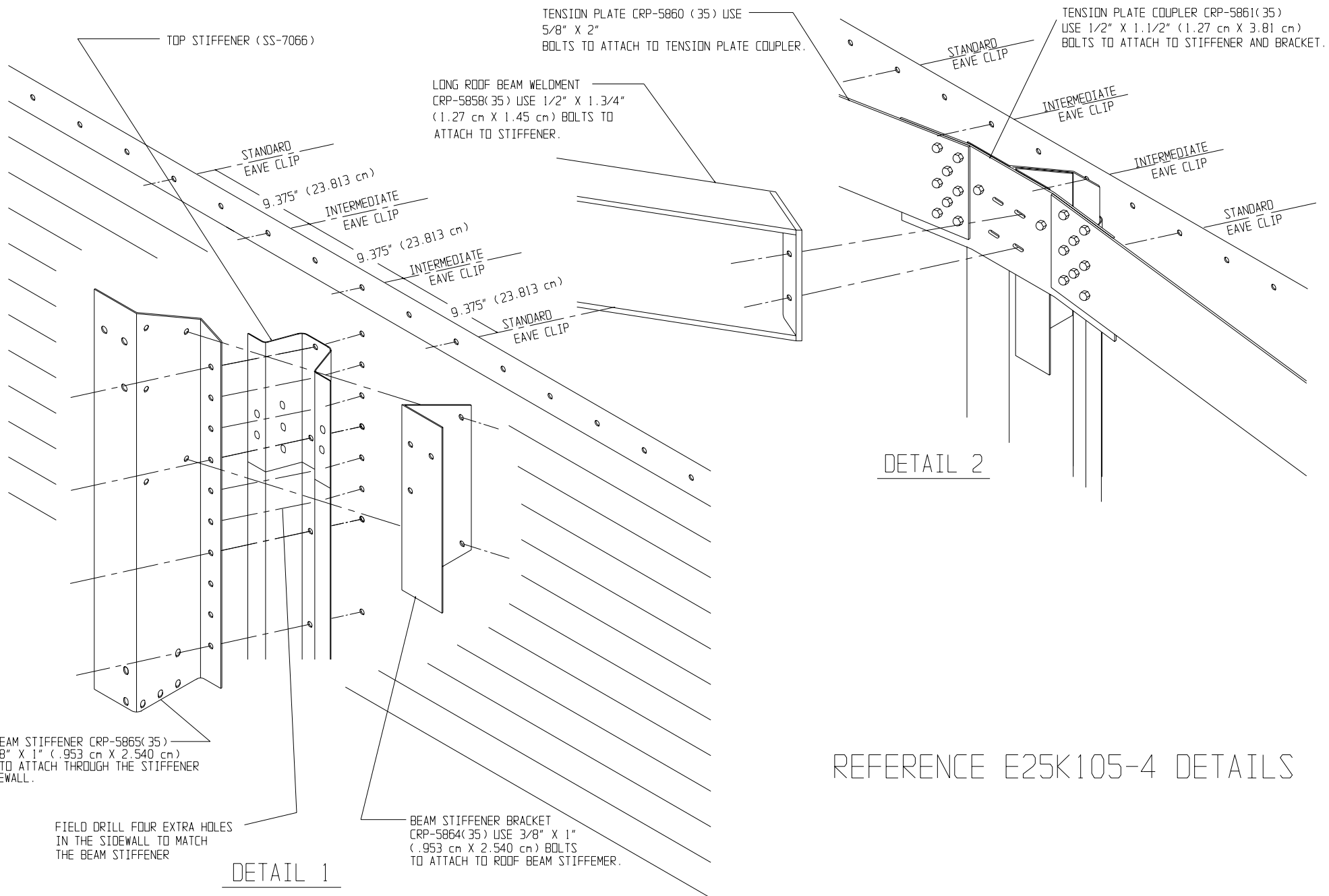
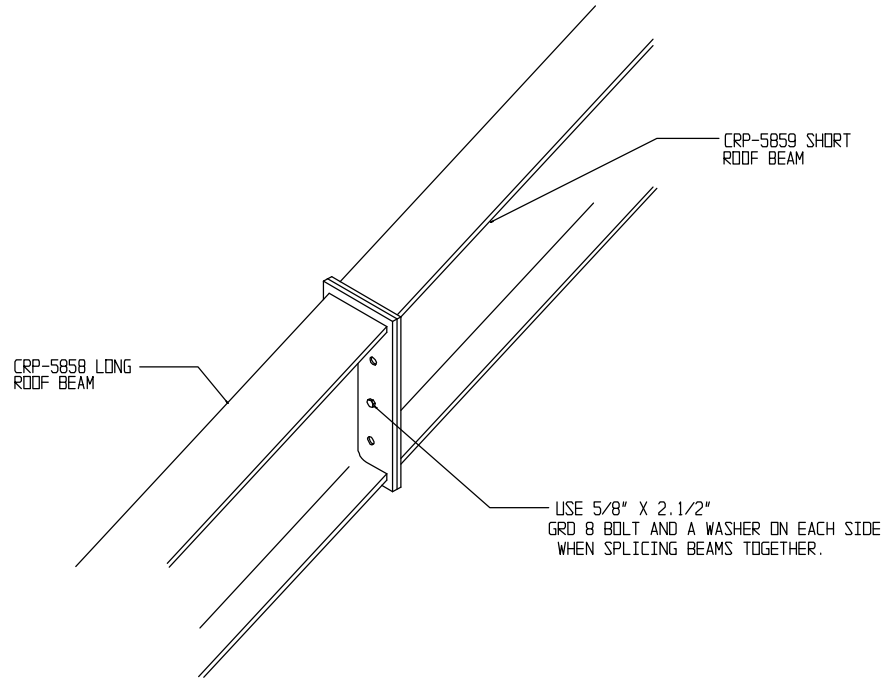
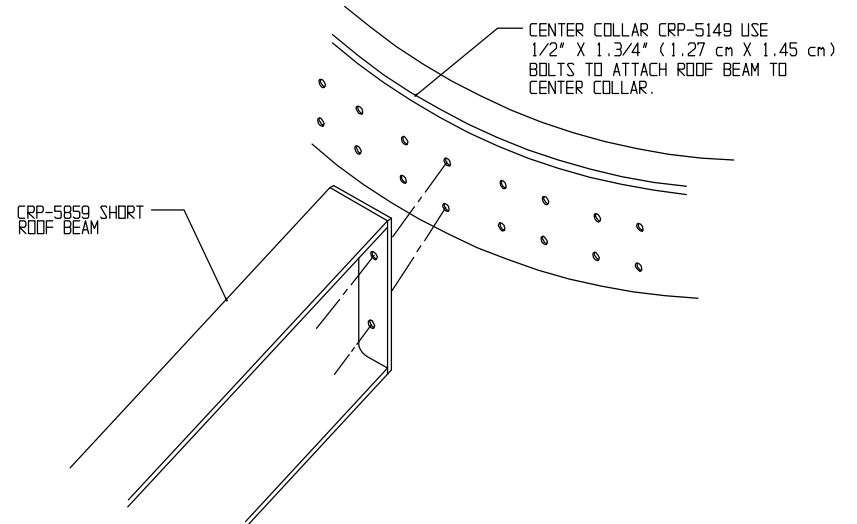




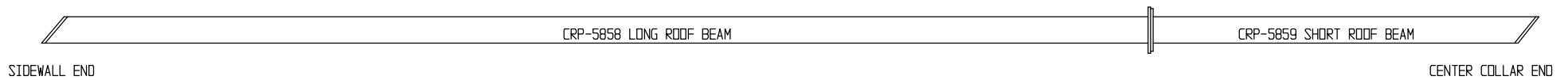
					 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.	SPECIAL 25 THOUSAND lb. 105' ROOF INSTRUCTIONS	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- - - - -	Quantity				Material
								Sq. Ft.	Bldg. Wt.	Ship Wt.		
1		BOLT SIZE NOTE REVISED	6/2/2005	KDK				Qty. By	Date	Scale	Drawing No.	
No.	ECN	Revision Description	Date	By	Assumption, Il. 62510 217/226-4421			9/20/99	NTS Work to Dimensions Do Not Scale	E25K105-1		



DETAIL 3



DETAIL 4



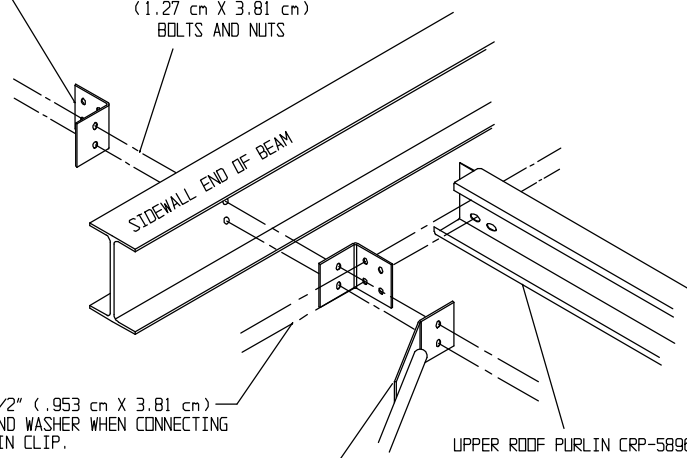
DETAIL 5

No.	ECN	Revision Description	Date	By	 GRAIN SYSTEMS, A DIVISION OF THE GSI GROUP, INC.	SPECIAL 25 THOUSAND lb. 105' ROOF INSTRUCTIONS	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- - - - -	Quantity			Material
								Sq. Ft.	Blk. Wt.	Ship Wt.	
								Dwn. By K. GAMMON Ck'd By	Date 9/20/99 Date	Scale NTS Work to Dimensions Do Not Scale	Drawing No. E25K105-2

Assumption, IL. 62510 217/226-4421

ROOF PURLIN CLIP CRP-4909
USED WITH UPPER PURLIN ONLY

USE 1/2" X 1.1/2"
(1.27 cm X 3.81 cm)
BOLTS AND NUTS



USE 3/8" X 1.1/2" (.953 cm X 3.81 cm)
BOLTS, NUTS, AND WASHER WHEN CONNECTING
PURLIN TO PURLIN CLIP.

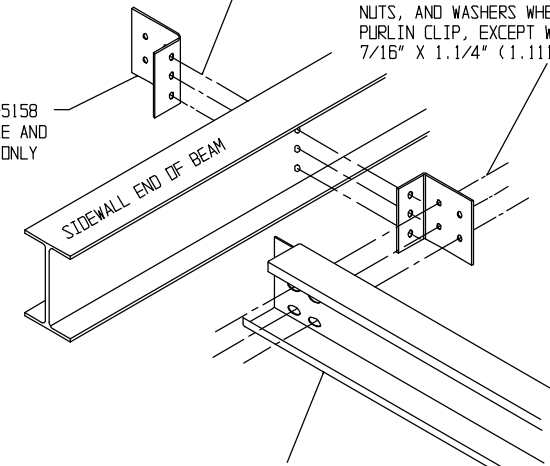
"X" BRACING WELDMENT

UPPER ROOF PURLIN CRP-5896

DETAIL 6

ROOF PURLIN CLIP CRP-5158
USED WITH UPPER MIDDLE AND
LOWER MIDDLE PURLINS ONLY

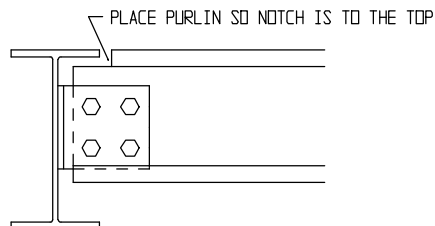
USE 1/2" X 1.1/2"
(1.27 cm X 3.81 cm)
BOLTS AND NUTS



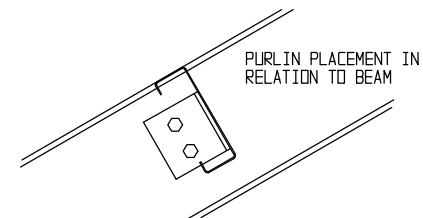
USE 3/8" X 1.1/2" (.953 cm X 3.810 cm) BOLTS,
NUTS, AND WASHERS WHEN CONNECTING PURLIN TO
PURLIN CLIP, EXCEPT WITH "X" BRACING USE
7/16" X 1.1/4" (1.111 cm X 3.175 cm) BOLTS.

UPPER MIDDLE ROOF PURLIN CRP-5866
LOWER MIDDLE ROOF PURLIN CRP-5868

DETAIL 6A

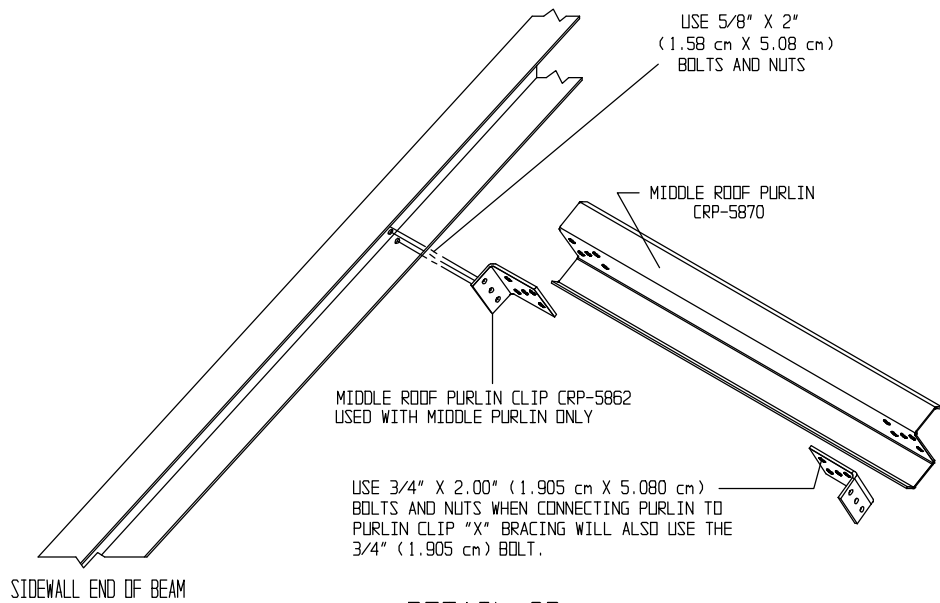


BEAM-PURLIN DETAIL

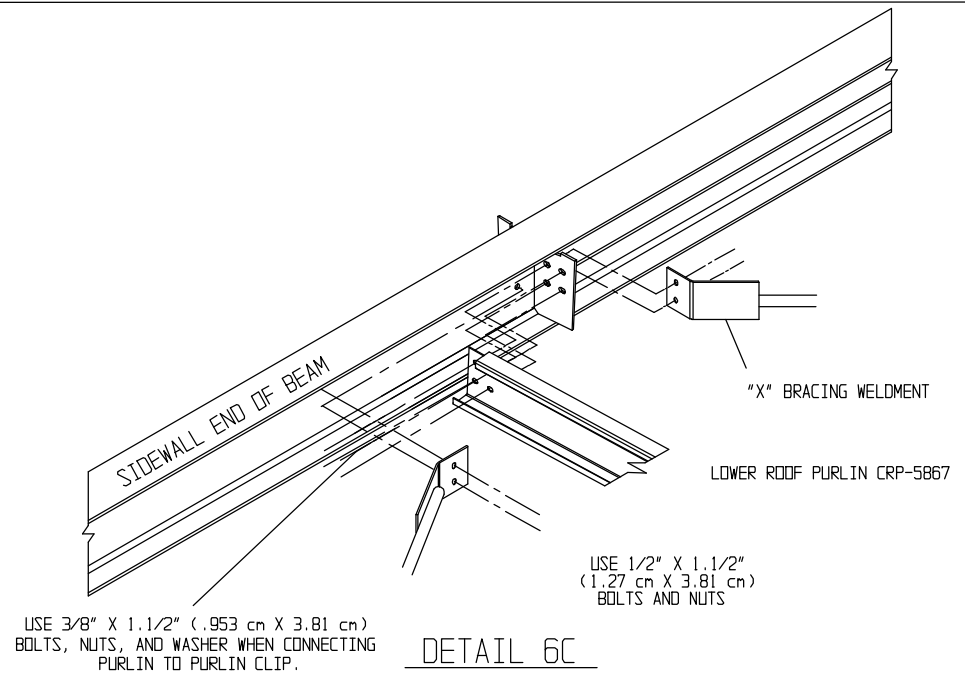


BEAM-PURLIN DETAIL

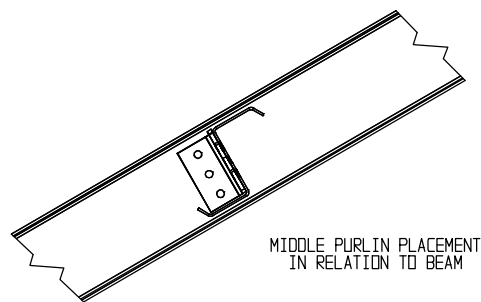
No.	ECN	Revision Description	Date	By	 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.	25K lb.	105' ROOF INSTRUCTIONS	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- - - - -	Quantity			Material
									Sq. Ft.	Blk. Wt.	Ship Wt.	
									Dwn. By K. GAMMON Chk'd By	Date 9/20/99 Date	Scale NTS Work to Dimensions Do Not Scale	Drawing No. E25K105-3A



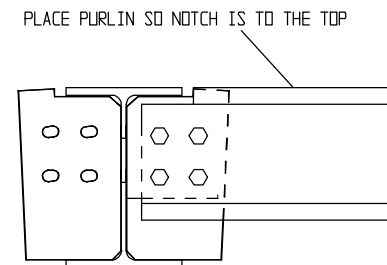
DETAIL 6B



DETAIL 6C

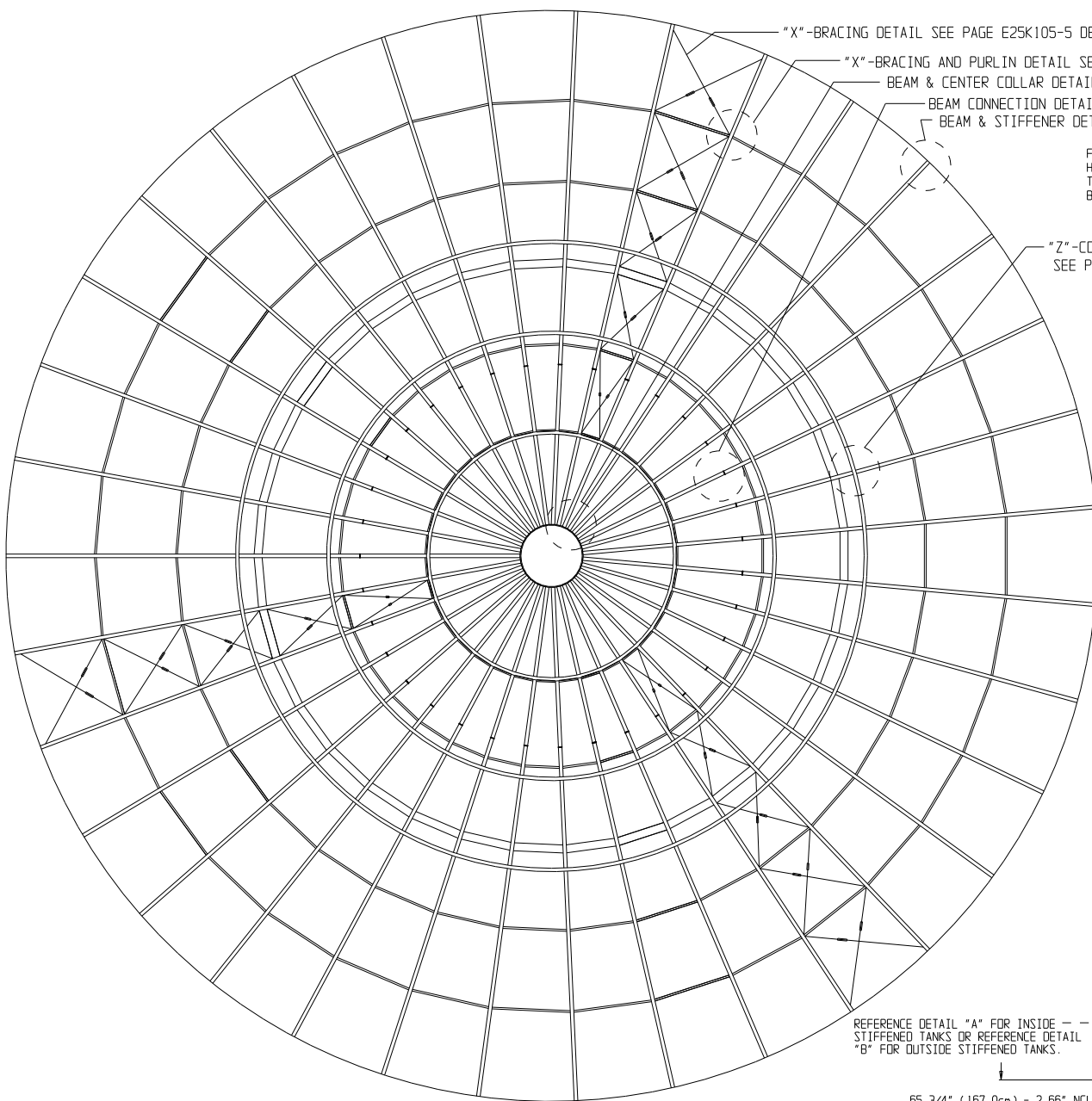


BEAM-PURLIN DETAIL



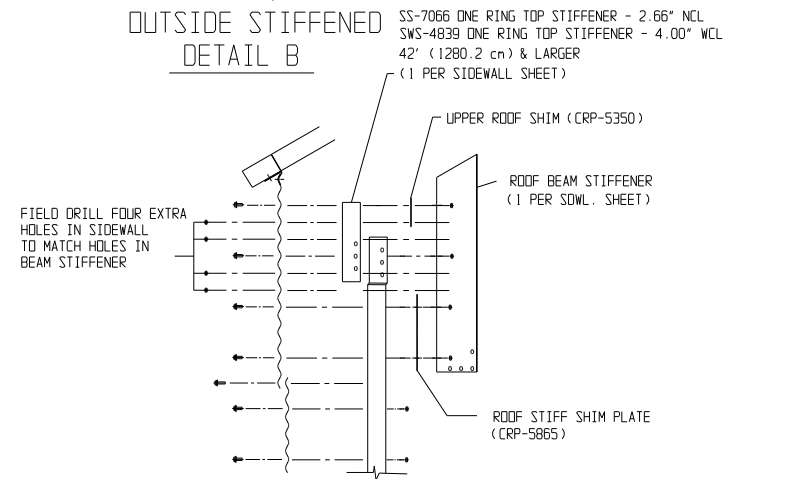
BEAM-PURLIN DETAIL

No.	ECN	Revision Description	Date	By	 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.	25K lb. 105' ROOF INSTRUCTIONS	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- -----	Quantity			Material E25K105-3B
								Sq. Ft.	Blk. Wt.	Ship Wt.	
								Dim. By K. GAMMON Chk'd By	Date 9/20/99 Date	Scale NTS Work to Dimensions Do Not Scale	Drawing No. E25K105-3B

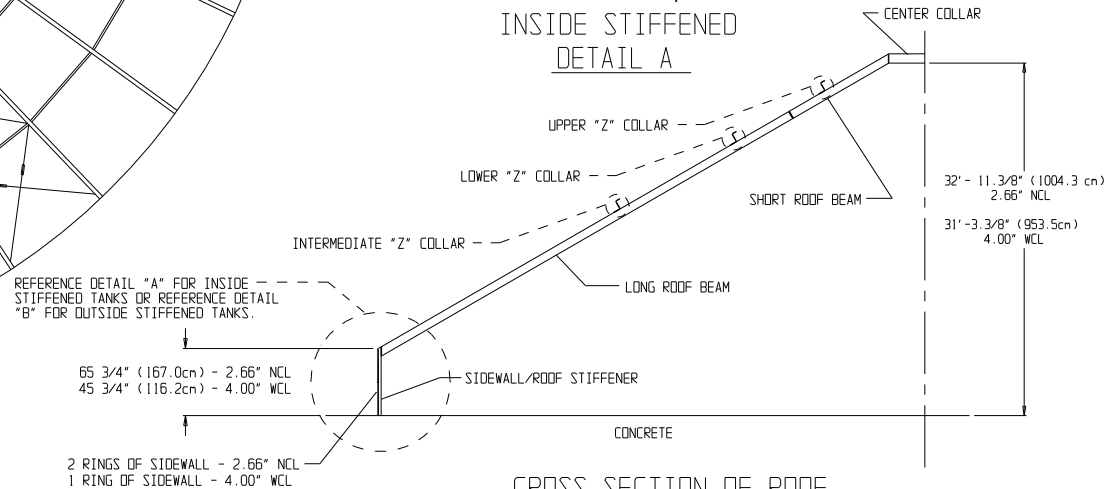


ROOF SUPPORT LAYOUT

OUTSIDE STIFFENED
DETAIL B



INSIDE STIFFENED
DETAIL A



CROSS SECTION OF ROOF

2	102707	REVISED DESIGN FOR 3 X-BRACE BAYS IPO 5	2/8/06	KDK	 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.
1		UPDATED DETAILS A & B	8/21/00	KG	
No.	ECN	Revision Description	Date	By	

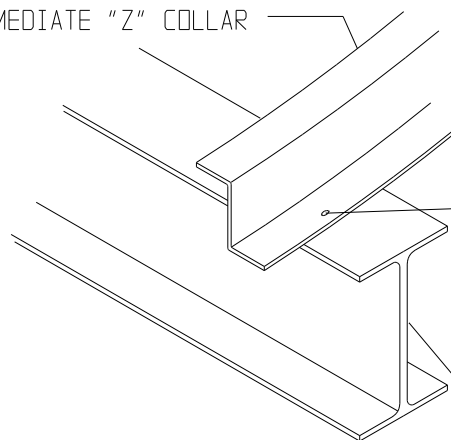
Assumption, IL. 62510 217/226-4421

SPECIAL 25 THOUSAND lb. 105' ROOF INSTRUCTIONS

TOLERANCES
(Unless Noted)
Fractions +/- 1/32"
Decimals +/- .031"
Angles +/-

Quantity		Blk. Wt.		Ship Wt.		Material
Sq. Ft.						
Drn. By	K. GAMMON	Date	9/20/99	Scale	NTS	
Chk'd By		Date		Work to Dimensions Do Not Scale		Drawing No. E25K105-4

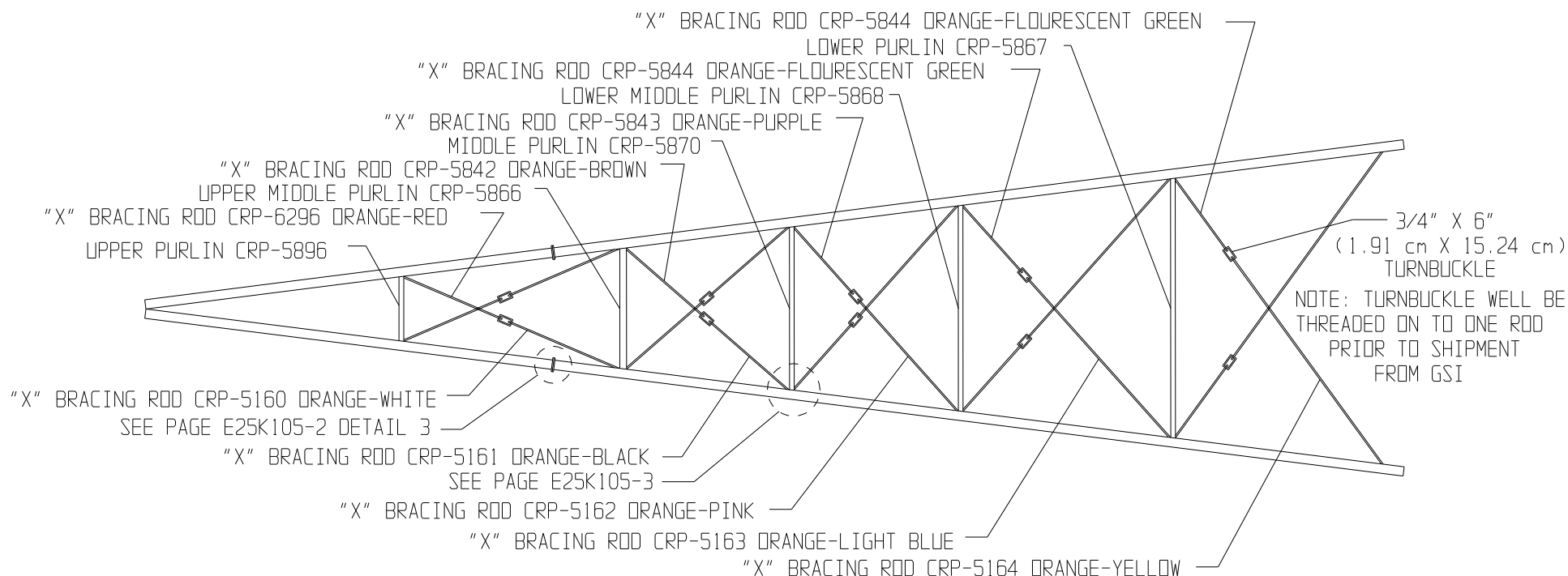
INTERMEDIATE "Z" COLLAR



1/2" X 1 1/2" (1.27 cm X 3.81 cm) BOLT AND NUT
LEAVE LOOSE UNTIL ROOF PANEL HAS BEEN PLACED.

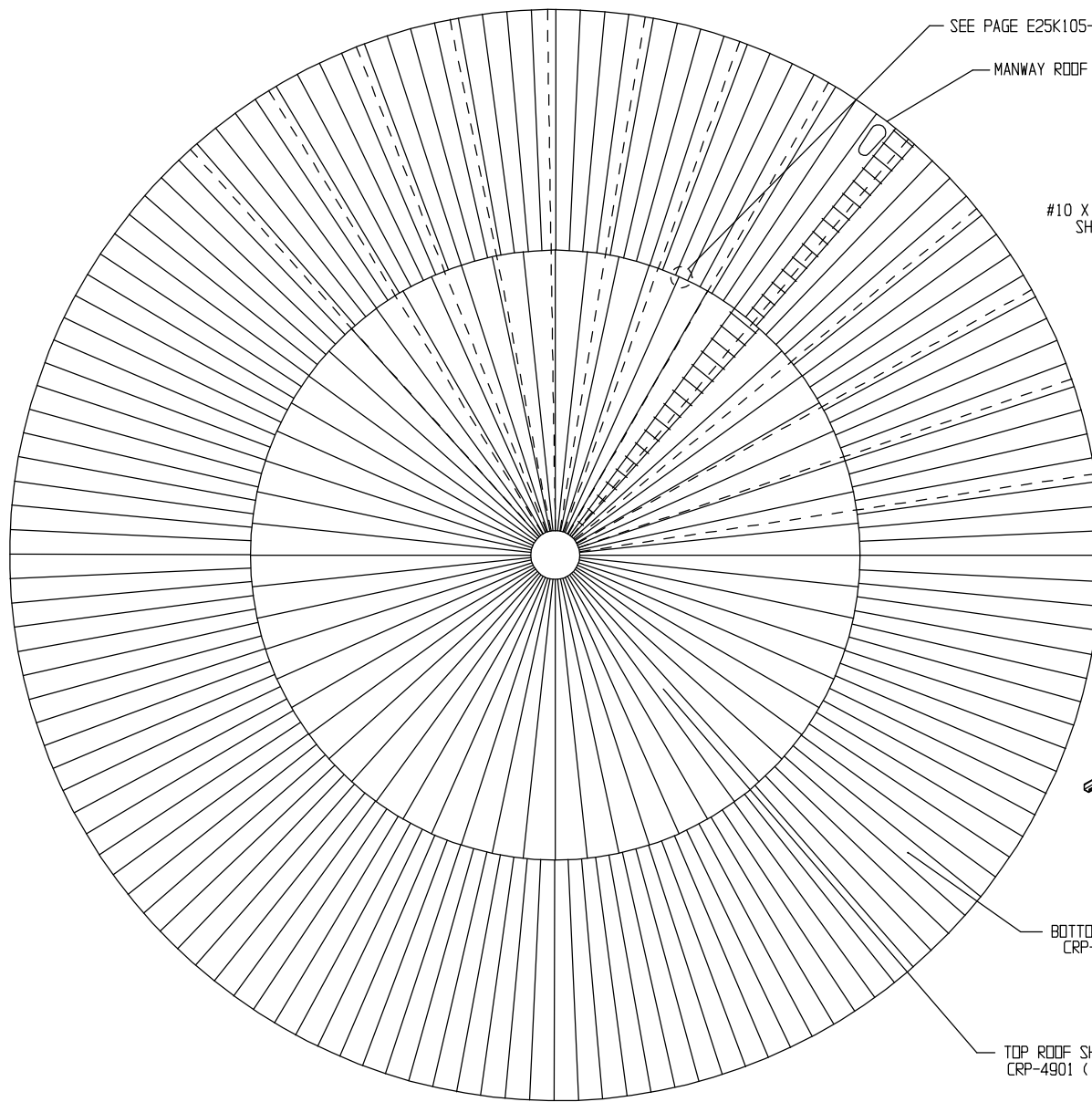
ROOF BEAM

DETAIL 7

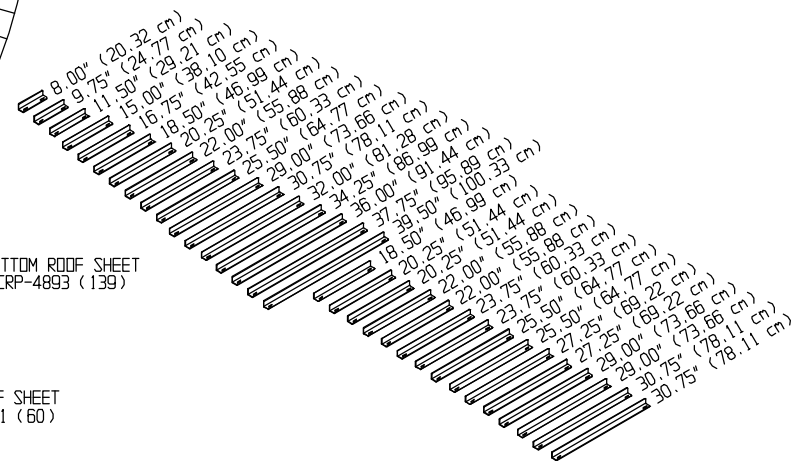
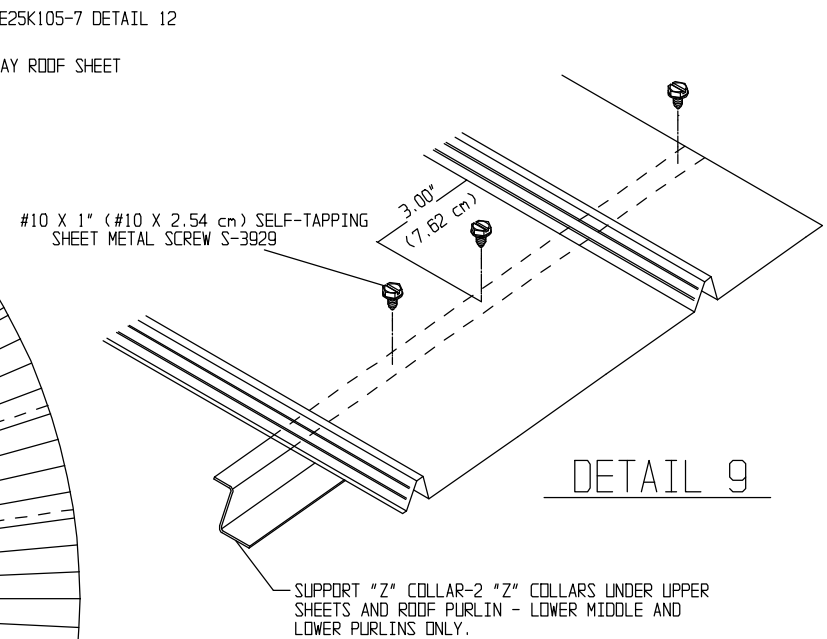


"X" BRACING BAY DETAIL 8

					 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.	SPECIAL 25 THOUSAND lb. 105' ROOF INSTRUCTIONS		TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/-		Quantity			Material
No.	ECN	Revision Description	Date	By						Sq. Ft.	Blk. Wt.	Ship Wt.	Des. By K. GAMMON
1	104173	CRP-6296 ORANGE-RED was CRP-5842 ORANGE-BROWN	22JUN06	TB	Assumption, IL 62510 217/226-4421								

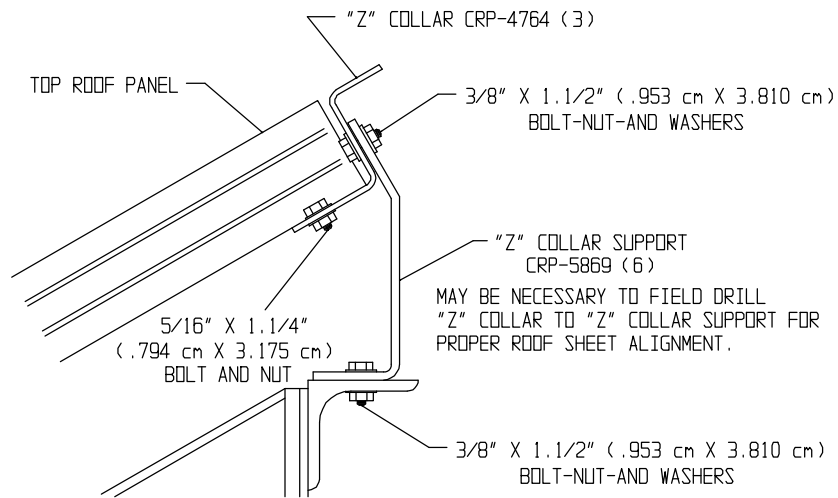


ROOF SHEET LAYOUT



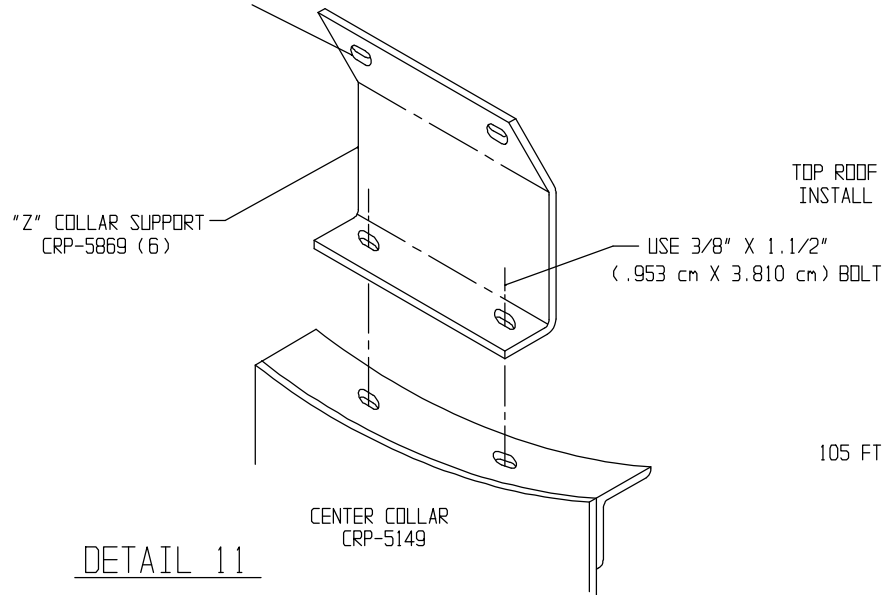
ROOF STEP LAYOUT

						 GRAIN SYSTEMS, A DIVISION OF THE GSI GROUP, INC. Assumption, IL 62510 217/226-4421	SPECIAL 25 THOUSAND lb.	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- ----	Quantity			Notes
									Sq. Ft.	Blk. Wt.	Ship Wt.	
									Dwn. By K. GAMMON	Date 9/20/99	Scale NTS	Drawing No. E25K105-6
No.	ECN	Revision Description			Date	By			Chk'd By	Date	Work to Dimensions (Do Not Scale)	

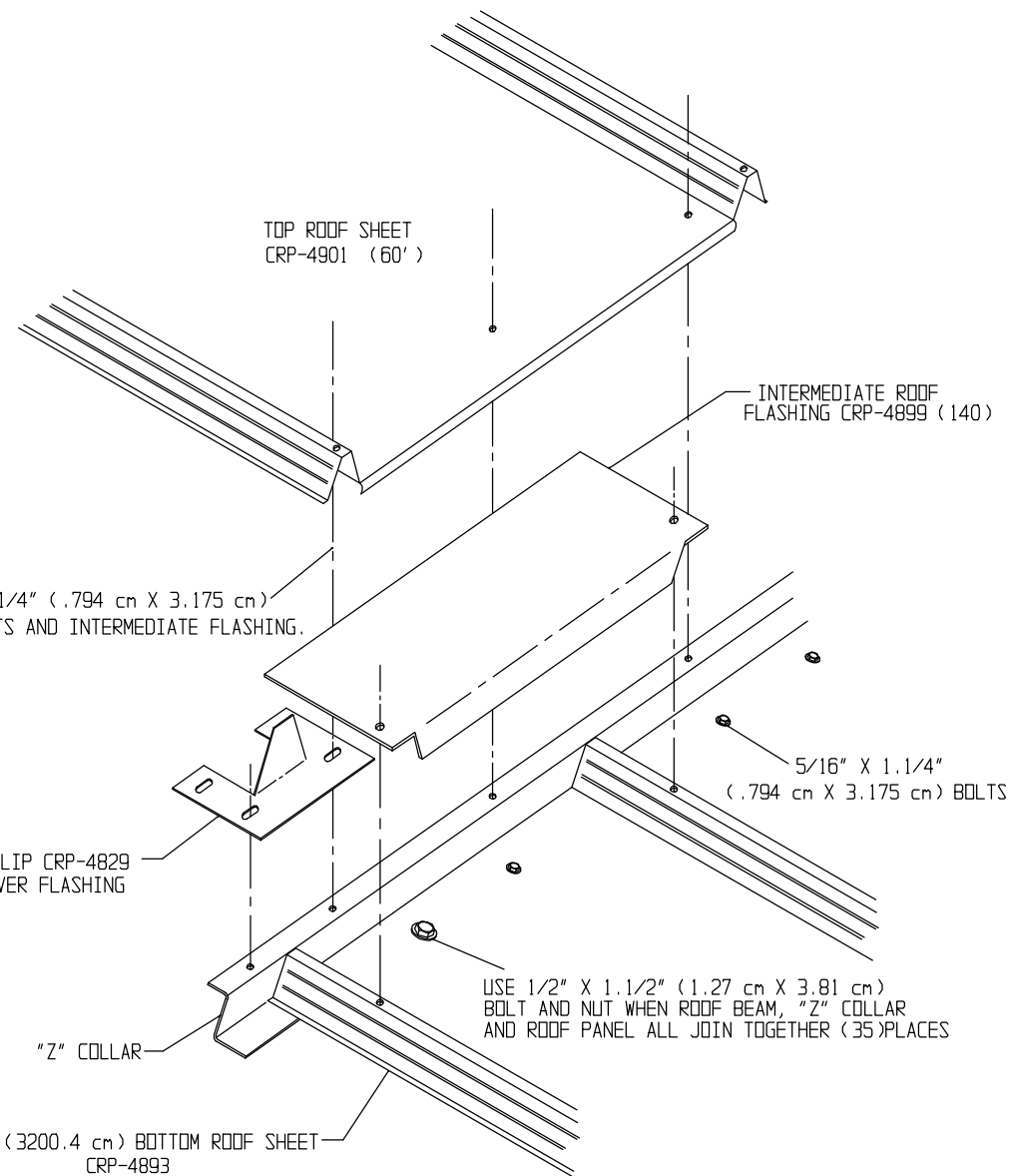


DETAIL 10

USE 3/8" X 1.1/2" (.953 cm X 3.810 cm)
BOLT-NUT-AND WASHERS TO ATTACH "Z"
COLLAR TO COLLAR SUPPORT (FIELD DRILL)



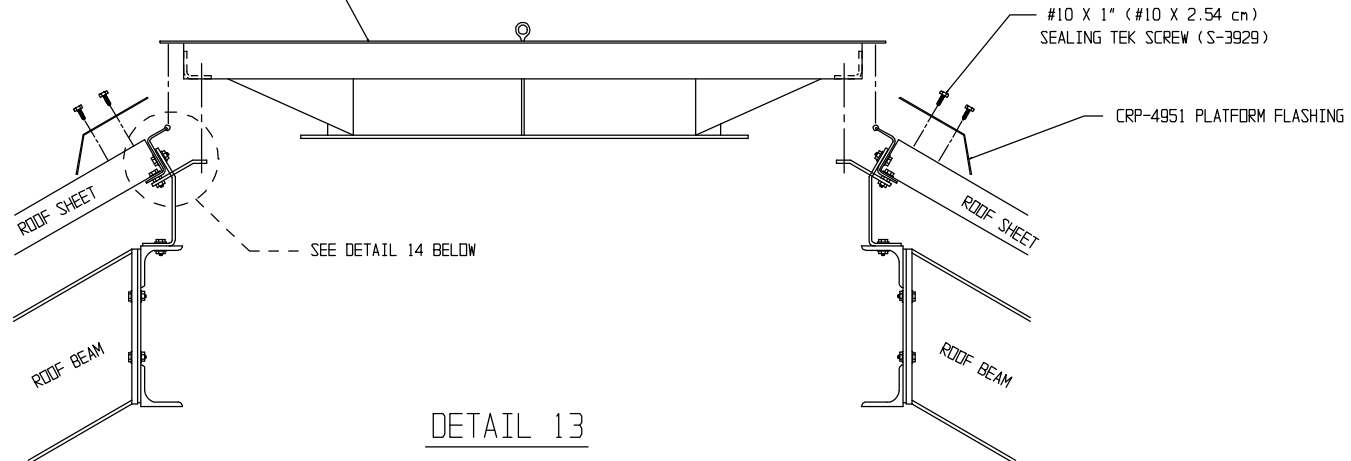
DETAIL 11



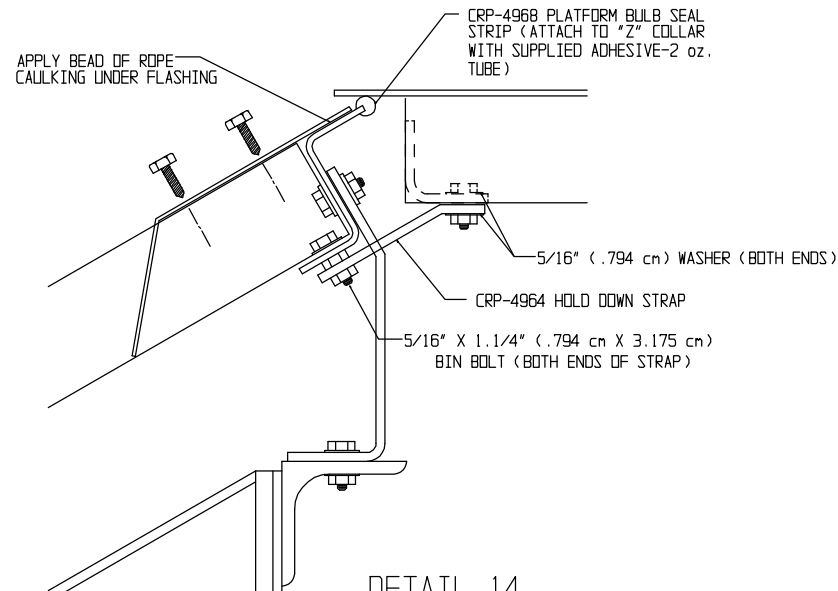
DETAIL 12

						 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.	SPECIAL 25 THOUSAND lb.	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- - - - -	Quantity			Material
					Sq. Ft.				Blk. Wt.	Ship Wt.		
						Assumption, IL 62510 217/226-4421	105 FT. ROOF INSTRUCTIONS		Drn. By K. GAMMON	Date 9/20/99	Scale	Drawing No. E25K105-7
No.	ECN	Revision Description	Date	By	Chk'd By				Date	Work to Dimensions Or Not Scale		

CRP-5723 LARGE ROOF PEAK PLATFORM WELDMENT (COLOR CODE GREEN)



DETAIL 13



DETAIL 14

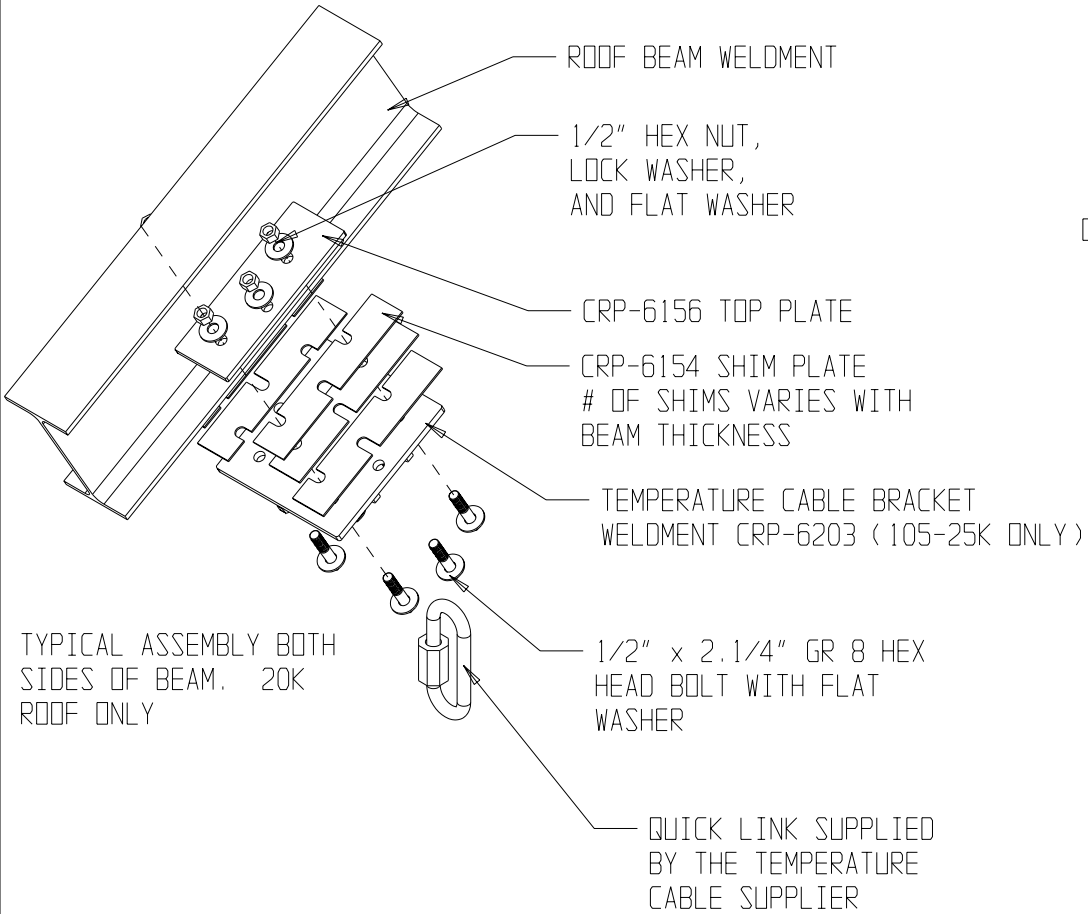
NOTE: HOLD DOWN STRAPS(6) MUST SHARE THE SAME BOLT AS A ROOF SHEET NOSE HOLE. EQUALLY SPACE THE SIX BRACKETS(60 DEG) USING THE DOUBLE NUT TECHNIQUE AS SHOWN IN DETAIL 14.

No.	ECN	Revision Description	Date	By	 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.	SPECIAL 25 THOUSAND lb. 105' ROOF INSTRUCTIONS	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- -----	Quantity			Material
								Sq. Ft.	Blk. Wt.	Ship Wt.	
								Dwn. By K. GAMMON Chk'd By	Date 9/20/99 Date	Scale NTS Work to Dimensions Do Not Scale	Drawing No. E25K105-8

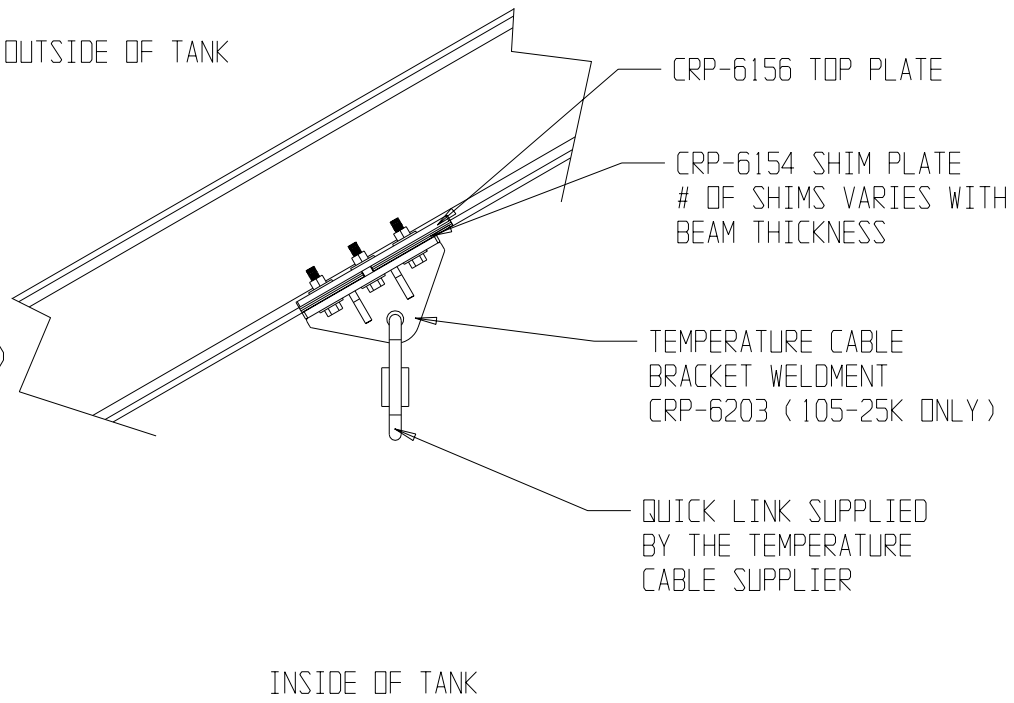
Assumption, IL. 62510 217/226-4421

THIS INSTRUCTION SHEET IS ONLY FOR 105 FT 25 THOUSAND lb. ROOFS

- NOTES: 1) DO NOT ATTACH WEIGHTS TO TEMPERATURE CABLES,
SECURE BOTTOM OF CABLES WITH A LIGHT TWINE TO THE FLOOR
- 2) NO ROOF BEAM SHALL SUPPORT MORE THAN ONE CABLE
- 3) THE CENTER CABLE MAY BE MOUNTED TO THE CENTER COLLAR WELDMENT.
- 4) REFERENCE INSTRUCTIONS FROM THE TEMPERATURE CABLE
SUPPLIER FOR INSTALLATION RADII.



DETAIL 20
UN-ASSEMBLED VIEW

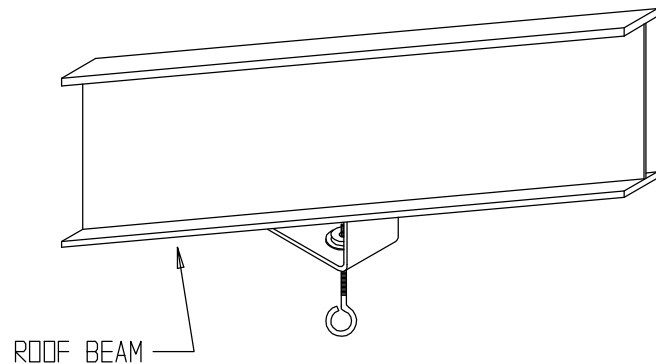


DETAIL 21
ASSEMBLED VIEW

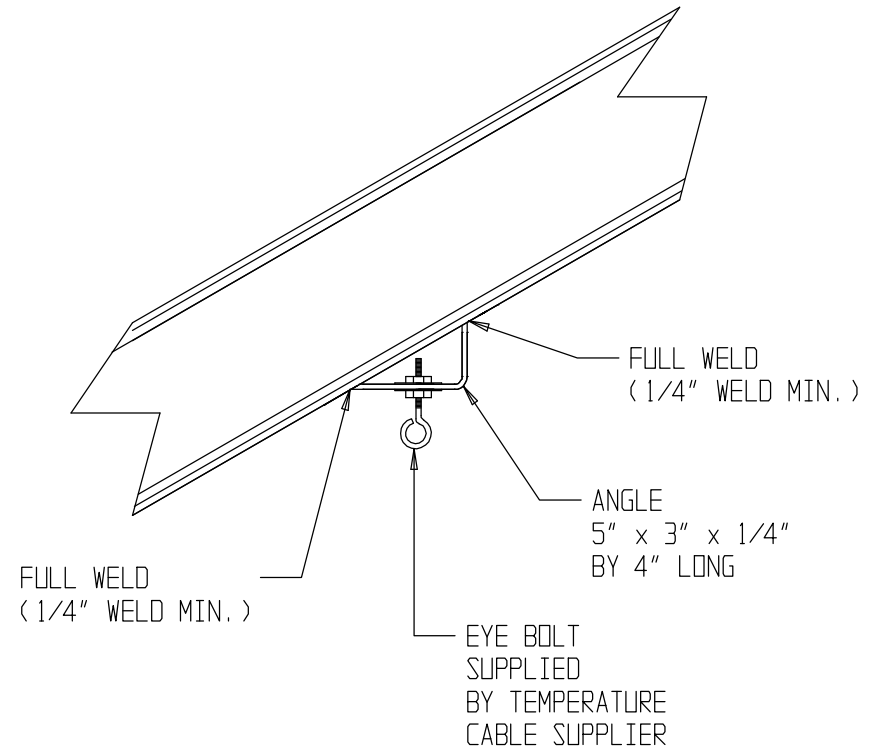
					 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.	25 THOUSAND lb.	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- - - - -	Quantity			PREG NO.			
									Sq. Ft.	Blk. Wt.	Ship Wt.	RE25K105-9		
1	13134	REV. TEMP CABLE SECTION OF INSTRUCTIONS	11/10/04	TJH		105' ROOF INSTRUCTIONS		Drn. By	K. GAMMON	Date	12/22/00	Scale	NTS	Drawing No.
No.	ECN	Revision Description	Date	By	Assumption, IL. 62510 217/226-4421				Chk'd By		Date		Work to Dimensions Do Not Scale	

FIELD FABRICATED TEMPERATURE CABLE SUPPORT RECOMMENDATIONS

THIS INSTRUCTION SHEET IS FOR 105 FT DIA. 25 THOUSAND lb. PEAK LOAD ROOFS.



DETAIL 17



DETAIL 18

NOTE:

- 1) DO NOT ATTACH WEIGHTS TO TEMPERATURE CABLES. SECURE BOTTOM OF CABLES WITH A LIGHT TWINE TO THE FLOOR.
- 2) DO NOT ATTACH MORE THAN ONE TEMPERATURE CABLE PER ROOF BEAM.

						 GRAIN SYSTEMS A DIVISION OF THE GSI GROUP, INC.	25 THOUSAND lb.	TOLERANCES (Unless Noted) Fractions +/- 1/32" Decimals +/- .031" Angles +/- ----	Quantity			PAGE NO.
									Sq. Ft.	Blk. Wt.	Ship Wt.	RE25K105-10
						Assumption, IL 62510 217/226-4421	105' ROOF INSTRUCTIONS		Drn. By K. GAMMON	Date 12/22/00	Scale NTS	Drawing No.
No.	ECN	Revision Description			Date				By	Chk'd By	Date	Work to Dimensions (On Net Scale)



GRAIN SYSTEMS, A
DIVISION OF THE
GSI GROUP, INC.

Assumption, IL. 62510 217/226-4421

25 THOUSAND lb.

105' ROOF INSTRUCTIONS

**TOLERANCES
(Unless Noted)**
Fractions +/- 1/32"
Decimals +/- .031"
Angles +/- -----

Quantity			PAGE NO.
Sq. Ft.	Blk. Wt.	Ship Wt.	RE25K105-10
Drn. By K. GAMMON	Date 12/22/00	Scale NTS	
Chk'd By	Date	Work to Dimensions On Net Scale	Drawing No. E25K105-10