



ANSI/SPRI GD-1 PERFORMANCE TEST REPORT

Rendered to:

SOUTHERN ALUMINUM FINISHING COMPANY, INC.

For:

G4-R9, G5-R9, Colonial and Roman Gutter Systems

Report No.: D6544.01-119-16

Report Date: 12/23/14

Test Record Retention Date: 09/25/18



ANSI/SPRI GD-1 PERFORMANCE TEST REPORT

Rendered to:

SOUTHERN ALUMINUM FINISHING COMPANY, INC.
8370 Highway 78
Villa Rica, Georgia 30180

Report No.: D6544.01-119-16
Test Dates: 05/08/14
Through: 09/25/14
Report Date: 12/23/14
Test Record Retention Date: 09/25/18

1.0 General Information

1.1 Product

G4-R9, G5-R9, Colonial and Roman Gutter systems

1.2 Project Summary

Architectural Testing, Inc. was contracted by Southern Aluminum Finishing Company, Inc. to perform ANSI/SPRI Test G-1, G-2 and G-3 on formed aluminum gutter systems in accordance with ANSI/SPRI GD-1 2010.

1.3 Qualifications

Architectural Testing in York, Pennsylvania has demonstrated compliance with ANSI/ISO/IEC Standard 17025 and is consequently accredited as a Testing Laboratory (TL-144) by International Accreditation Service, Inc.

1.4 Witnessing

Mr. Corey Faciane from Southern Aluminum Finishing Company, Inc. was present on 05/08/14, 05/09/14, 06/17/14, and 06/18/14 to demonstrate proper installation of the gutter systems, and to witness the testing conducted and reported herein.

1.5 Conditions of Testing

All testing reported herein was conducted in a laboratory set to maintain temperature in the range of $68 \pm 4^{\circ}\text{F}$ and humidity in the range of $50 \pm 5\%$ RH.

2.0 ANSI/SPRI Test G-1, Horizontal Test of Installed Gutter Systems

2.1 Specimen Description

10 ft long sections of *G4-R9*, *G5-R9*, *Colonial* and *Roman* gutter systems were attached to parapet mock-ups constructed of Southern White Pine using the following connection assemblies:

G5-R9 and *G4-R9* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/2 in on center and 1 in from each end were attached to a simulated roof edge mock-up with two #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. Gutter profile (*G5-R9* and *G4-R9*) was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then hooked into the gutter's hemmed edge and were then attached to each gutter profile with 1/8" blind aluminum rivets.

6 in and 8 in *Colonial* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/8 in on center and 3 in from one end and 1/2 in from the other end were attached to a simulated roof edge mock-up with two #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. A gutter liner was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then placed in position in the gutter liner. The fascia was then clipped to the bottom of the support bracket then the heavy duty aluminum straps were hooked into the fascia's hemmed edge and fastened to the gutter liner with 1/8" blind aluminum rivets.

6 in and 8 in *Roman* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/8 in on center and 3 in from one end and 1/2 in from the other end were attached to a simulated roof edge mock-up with three #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. A gutter liner was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then placed in position in the gutter liner. The fascia was then clipped to the bottom of the support bracket then the heavy duty aluminum straps were hooked into the fascia's hemmed edge and fastened to the gutter liner with 1/8" blind aluminum rivets.

Prior to assembly, the front face of the gutter was drilled and fitted with ten 5/16 in eyebolts, fender washers (far side only) and hex nuts (one each side), six inches from each end and twelve inches on center, on the longitudinal centerline. See Drawings in Appendix A and Photographs in Appendix B for additional details.

2.2 Test Procedure

Load was applied to the ten eye bolts using equal-length chains, a spreader beam, steel cable and an electric winch. Applied load was measured with an in-line 2000 pound load cell. Center-point deflection of the gutter face was measured with an electronic linear displacement transducer. Load was applied incrementally and held ("Sustained") for a minimum of 60 seconds with intermediate load relaxation periods for specimen deflection to stabilize. See photographs in Appendix B for test set-up.

2.3 Test Results

ANSI/SPRI Test G-1, 6 in *Roman* Gutter System Test Dates: 08/01/14 and 09/25/14

Specimen No.	Peak Load (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1263	1188	300
2	863	792	200
3	1225	1188	300
Average:	1117	1056	267

ANSI/SPRI Test G-1, 8 in *Roman* Gutter System Test Date: 06/18/14

Specimen No.	Peak Load (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1289	1246	260
2	1468	1438	300
3	1420	1390	290
Average:	1392	1358	283

ANSI/SPRI Test G-1, 6 in *Colonial* Gutter System Test Dates: 08/06/14 and 08/07/14

Specimen No.	Peak Load (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	900	871	220
2	1104	1029	260
3	1229	1188	300
Average:	1078	1029	260

2.3 Test Results (Continued)

ANSI/SPRI Test G-1, 8 in Colonial Gutter System Test Dates: 8/14/14 and 8/15/14

Specimen No.	Peak Load (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1244	1198	250
2	1333	1246	260
3	1273	1198	250
Average:	1283	1214	253

ANSI/SPRI Test G-1, G4-R9 Gutter System¹ Test Date: 05/08/14

Specimen No.	Peak Load (lb) ¹	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1336	1267	190
2	1019	1000	150
3	685	667	100
Average:	1013	972	147

¹ The G4-R9 gutter system was deemed worst case; therefore test results also apply to the G4-R6 and G4-R8 gutter system.

ANSI/SPRI Test G-1, G5-R9 Gutter System¹ Test Date: 06/17/14

Specimen	Peak Load (lb) ¹	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1024	833	125
2	469	333	50
3	850	833	125
Average:	781	666	100

¹ The G5-R9 gutter system was deemed worst case; therefore test results also apply to the G5-R6 and G5-R8 gutter system.

3.0 ANSI/SPRI Test G-2, Vertical Test of Installed Gutter Systems

3.1 Specimen Description

10 ft long sections of *G4-R9*, *G5-R9*, *Colonial* and *Roman* gutter systems were attached to parapet mock-ups constructed of Southern White Pine using the following connection assemblies:

G5-R9 and *G4-R9* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/2 in on center and 1 in from each end were attached to a simulated roof edge mock-up with two #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. Gutter profile (*G5-R9* and *G4-R9*) was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then hooked into the gutter's hemmed edge and were then attached to each gutter profile with 1/8" blind aluminum rivets.

6 in and 8 in *Colonial* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/8 in on center and 3 in from one end and 1/2 in from the other end were attached to a simulated roof edge mock-up with two #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. A gutter liner was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then placed in position in the gutter liner. The fascia was then clipped to the bottom of the support bracket then the heavy duty aluminum straps were hooked into the fascia's hemmed edge and fastened to the gutter liner with 1/8" blind aluminum rivets.

6 in and 8 in *Roman* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/8 in on center and 3 in from one end and 1/2 in from the other end were attached to a simulated roof edge mock-up with three #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. A gutter liner was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then placed in position in the gutter liner. The fascia was then clipped to the bottom of the support bracket then the heavy duty aluminum straps were hooked into the fascia's hemmed edge and fastened to the gutter liner with 1/8" blind aluminum rivets.

Prior to assembly, the bottom face of the gutter was drilled and fitted with ten 5/16 in eyebolts, fender washers (far side only) and hex nuts (one each side), six inches from each end and twelve inches on center, on the longitudinal centerline. See Drawings in Appendix A and Photographs in Appendix B for additional details.

3.2 Test Procedure

Load was applied to the ten eye bolts using equal-length chains, a spreader beam, steel cable and an electric winch. Applied load was measured with an in-line 2000 pound load cell. Center-point deflection of the gutter face was measured with an electronic linear displacement transducer. Load was applied incrementally and held ("Sustained") for a minimum of 60 seconds with intermediate load relaxation periods for specimen deflection to stabilize. See photographs in Appendix B for test set-up.

3.3 Test Results

ANSI/SPRI Test G-2, 6 in *Roman* Gutter System Test Dates: 07/16/14, 07/29/14, and 07/30/14

Specimen No.	Peak Load at Failure (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1397	1375	300
2	1461	1375	300
3	1427	1375	300
Average:	1428	1375	300

ANSI/SPRI Test G-2, 8 in *Roman* Gutter System Test Date: 07/15/14

Specimen No.	Peak Load at Failure (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1653	1625	300
2	1657	1625	300
3	1666	1625	300
Average:	1659	1625	300

ANSI/SPRI Test G-2, 6 in *Colonial* Gutter System Test Dates: 08/07/14 and 08/08/14

Specimen No.	Peak Load at Failure (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1416	1375	300
2	1437	1375	300
3	1413	1375	300
Average:	1422	1375	300

3.3 Test Results (Continued)

ANSI/SPRI Test G-2, 8 in Colonial Gutter System Test Dates: 08/15/14 and 09/04/14

Specimen No.	Peak Load at Failure (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1667	1625	300
2	1685	1625	300
3	1672	1625	300
Average:	1675	1625	300

ANSI/SPRI Test G-2, G4-R9 Gutter System¹ Test Date: 05/09/14

Specimen No.	Peak Load at Failure (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1029	1000	150
2	1091	1067	160
3	1092	1067	160
Average:	1071	1045	157

¹ The G4-R9 gutter system was deemed worst case; therefore test results also apply to the G4-R6 and G4-R8 gutter system.

ANSI/SPRI Test G-2, G5-R9 Gutter System¹ Test Date: 06/17/14

Specimen No.	Peak Load at Failure (lb)	Max. Sustained Load prior to Failure (lb)	Equivalent Sustained Pressure (psf)
1	1012	1000	150
2	1016	1000	150
3	1016	1000	150
Average:	1015	1000	150

¹ The G5-R9 gutter system was deemed worst case; therefore test results also apply to the G5-R6 and G5-R8 gutter system.

4.0 ANSI/SPRI Test G-3, Static Test of Installed Gutter Systems

4.1 Specimen Description

10 ft long sections of *G4-R9*, *G5-R9*, *Colonial* and *Roman* gutter systems were attached to parapet mock-ups constructed of Southern White Pine using the following connection assemblies:

G5-R9 and *G4-R9* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/2 in on center and 1 in from each end were attached to a simulated roof edge mock-up with two #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. Gutter profile (*G5-R9* and *G4-R9*) was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then hooked into the gutter's hemmed edge and were then attached to each gutter profile with 1/8" blind aluminum rivets.

6 in and 8 in *Colonial* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/8 in on center and 3 in from one end and 1/2 in from the other end were attached to a simulated roof edge mock-up with two #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. A gutter liner was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then placed in position in the gutter liner. The fascia was then clipped to the bottom of the support bracket then the heavy duty aluminum straps were hooked into the fascia's hemmed edge and fastened to the gutter liner with 1/8" blind aluminum rivets.

6 in and 8 in *Roman* Gutter Systems:

Heavy duty aluminum support brackets spaced at 29-1/8 in on center and 3 in from one end and 1/2 in from the other end were attached to a simulated roof edge mock-up with three #10-12 x 2" (0.131 in minor diameter) trim head, stainless steel screws. A gutter liner was installed in the support brackets and fastened to the roof edge mockup with #10-12 x 1" (0.128 in minor diameter) hex-head, stainless steel fasteners spaced at 12 in on center and 6 in from each end. Heavy duty aluminum straps spaced at 30 in on center and 15 in from each end were then placed in position in the gutter liner. The fascia was then clipped to the bottom of the support bracket then the heavy duty aluminum straps were hooked into the fascia's hemmed edge and fastened to the gutter liner with 1/8" blind aluminum rivets.

Prior to assembly, the bottom face of the gutter was drilled and fitted with ten 5/16 in eyebolts, fender washers (far side only) and hex nuts (one each side), six inches from each end and twelve inches on center, on the longitudinal centerline. See Drawings in Appendix A and Photographs in Appendix B for additional details.

4.2 Test Procedure

Load was applied to the ten eye bolts of the gutter bottom surface using equal-length chains, a spreader beam, steel cable and an electric winch. Applied load was measured with an in-line 2000 pound load cell. Center-point deflection of the coping face was measured with an electronic linear displacement transducer. The load was applied continually until failure occurred or the capacity of the test fixture was reached. See Photographs in Appendix B for test set-up.

4.3 Test Results

ANSI/SPRI Test G-3, 6 in *Roman* Gutter System Test Dates: 07/30/14 and 07/31/14

Specimen No.	Maximum Load at Failure (lb)	Deflection at Maximum Load (in)	Load Deviation from Average
1	766	0.80	-1.7%
2	757	0.63	-2.8%
3	815	0.97	+4.6%
Average:	779	0.80	

ANSI/SPRI Test G-3, 8 in *Roman* Gutter System Test Dates: 07/15/14 and 07/16/14

Specimen No.	Maximum Load at Failure (lb)	Deflection at Maximum Load (in)	Load Deviation from Average
1	1837	2.54	+37.0%
2	1122	1.42	-16.3%
3	1065	1.55	-20.6%
Average:	1341	1.84	

ANSI/SPRI Test G-3, 6 in *Colonial* Gutter System Test Dates: 08/08/14 and 08/11/14

Specimen No.	Maximum Load ¹ at Failure (lb)	Deflection at Maximum Load (in)	Load Deviation from Average
1	3493	2.13	+39.7%
2	2005	1.72	-19.8%
3	2003	1.72	-19.9%
Average:	2500	1.86	

¹ Applied load stopped at 2000 lb (Test fixture capacity)

4.3 Test Results (Continued)

ANSI/SPRI Test G-3, 8 in Colonial Gutter System

Test Dates: 09/05/14 and 09/06/14

Specimen No.	Maximum Load ¹ at Failure (lb)	Deflection at Maximum Load (in)	Load Deviation from Average
1	2007	1.84	-0.4%
2	2017	1.79	+0.1%
3	2022	1.66	+0.3%
Average:	2015	1.76	

¹ Applied load stopped at 2000 lb (Test fixture capacity)

ANSI/SPRI Test G-3, G4-R9 Gutter System¹

Test Date: 05/09/14

Specimen No.	Maximum Load ² at Failure (lb)	Deflection at Maximum Load (in)	Load Deviation from Average
1	2044	2.32	+1.7%
2	1977	2.32	-1.6%
3	2005	2.67	-0.2%
Average:	2009	2.44	

¹ The G4-R9 gutter system was deemed worst case; therefore test results also apply to the G4-R6 and G4-R8 gutter system.

² Applied load stopped at 2000 lb (Test fixture capacity)

ANSI/SPRI Test G-3, G5-R9 Gutter System¹

Test Dates: 06/17/14 and 06/18/14

Specimen No.	Maximum Load ² at Failure (lb)	Deflection at Maximum Load (in)	Load Deviation from Average
1	2013	3.05	0%
2	2016	2.80	+0.1%
3	2009	2.62	-0.2%
Average:	2013	2.82	

¹ The G5-R9 gutter system was deemed worst case; therefore test results also apply to the G5-R6 and G5-R8 gutter system.

² Applied load stopped at 2000 lb (Test fixture capacity)

5.0 Closing Statement

Architectural Testing will service this report for the entire test record retention period. Test records that are retained such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Architectural Testing, Inc. for the entire test record retention period.

Results obtained are tested values and were secured using the designated test methods. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimens tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.:

Adam J. Schrum
Technician I
Structural Systems Testing

V. Thomas Mickley, Jr., P.E.
Senior Project Engineer
Structural Systems Testing

AJS:vtm/jas

Attachments (pages): This report is complete only when all attachments listed are included

Appendix A - Drawings (34)

Appendix B - Photographs (3)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	12/23/14	N/A	Original report issue

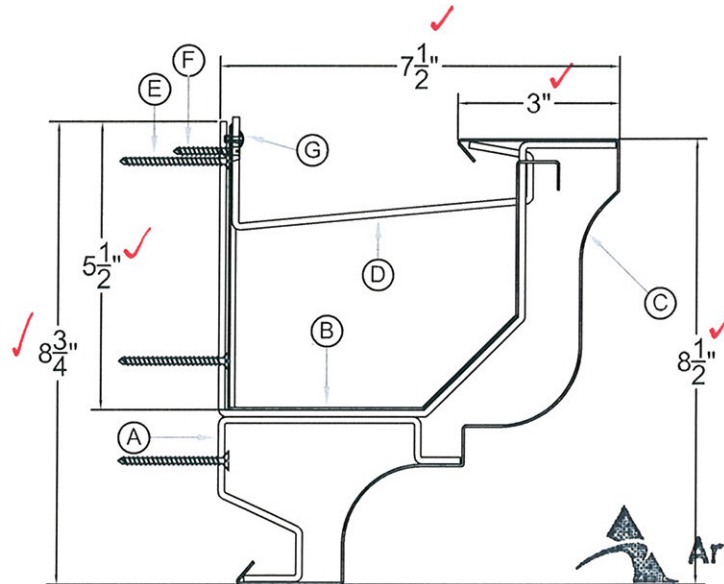


D6544.01-119-16

APPENDIX A

Drawings

ROMAN PROFILE
6 Inch Size



MODEL NUMBER
DSR-6



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # D6544.01-119-16

Date 12-15-14 Tech VAm

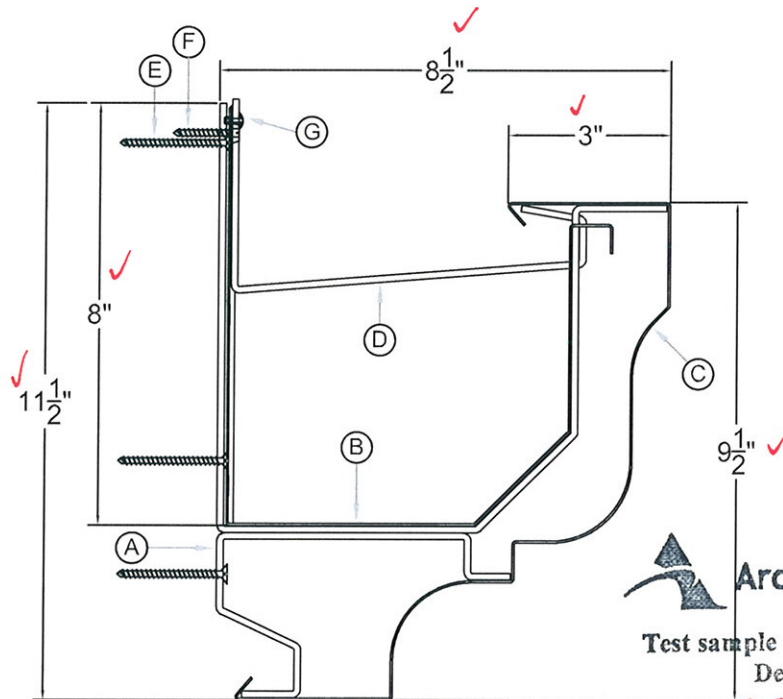
- (A) Heavy duty aluminum support brackets @ 30" centers.
- (B) Liner 10'-0" length, 1" telescoping lap joint.
- (C) Roman Fascia 10'-0" length with 3/8" expansion reveal joint.
- (D) Heavy duty aluminum interior straps @ 30" centers.
- (E) #10 x 2" S.S. Screw(s) to secure support bracket
- (F) #10 x 1" (if attached to wood studs) or #10 x 3/4" (if attached to metal studs) S.S. Screw(s) through elongated holes (12" centers) to secure liner.
- (G) Aluminum Rivet to secure interior strap to liner.

METAL OPTIONS			FINISH OPTIONS		
METAL	LINER	FASCIA	FINISH	LINER	FASCIA
0.040" Aluminum	●	●	EZ Mix Kynar	● *	●
0.050" Aluminum	●	●	Custom Kynar	● *	●
0.063" Aluminum	●	●	Clear Anodized	● *	●
0.080" Aluminum	●	●	Integral Color Anodized	● *	●
0.090" Aluminum	●	●	Mill Finished	●	●
16 OZ Copper	●	●			

Default selections are in **BOLD**

* Only the interior of the liner is finished

ROMAN PROFILE
8 Inch Size



MODEL NUMBER
DSR-8



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # DG544.01-119-16

Date 12-15-14 Tech yfm

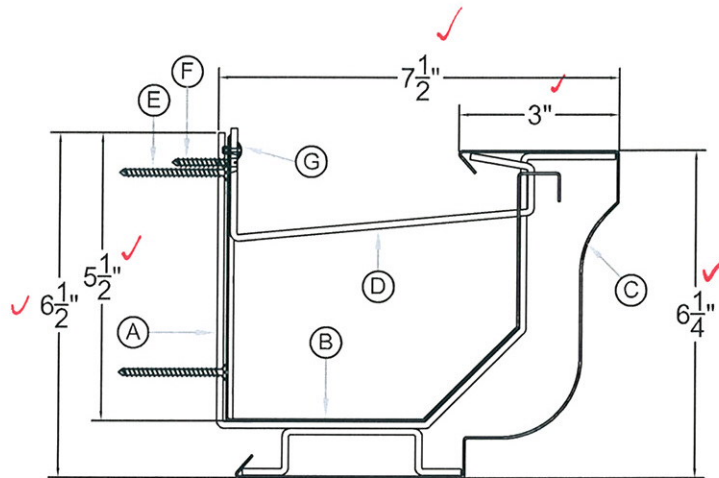
- (A) Heavy duty aluminum support brackets @ 30" centers.
- (B) Liner 10'-0" length, 1" telescoping lap joint.
- (C) Roman Fascia 10'-0" length with 3/8" expansion reveal joint.
- (D) Heavy duty aluminum interior straps @ 30" centers.
- (E) #10 x 2" S.S. Screw(s) to secure support bracket
- (F) #10 x 1" (if attached to wood studs) or #10 x 3/4" (if attached to metal studs) S.S. Screw(s) through elongated holes (12" centers) to secure liner.
- (G) Aluminum Rivet to secure interior strap to liner.

METAL OPTIONS			FINISH OPTIONS		
METAL	LINER	FASCIA	FINISH	LINER	FASCIA
0.040" Aluminum	●	●	EZ Mix Kynar	○*	●
0.050" Aluminum	○	○	Custom Kynar	○*	○
0.063" Aluminum	○	○	Clear Anodized	○*	○
0.080" Aluminum	○	○	Integral Color Anodized	○*	○
0.090" Aluminum	○	○	Mill Finished	●	○
16 OZ Copper	○	○			

Default selections are in **BOLD**

* Only the interior of the liner is finished

COLONIAL PROFILE
6 Inch Size



MODEL NUMBER
DSC-6



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # D6544.01-119-16

Date 12-15-14 Tech vjm

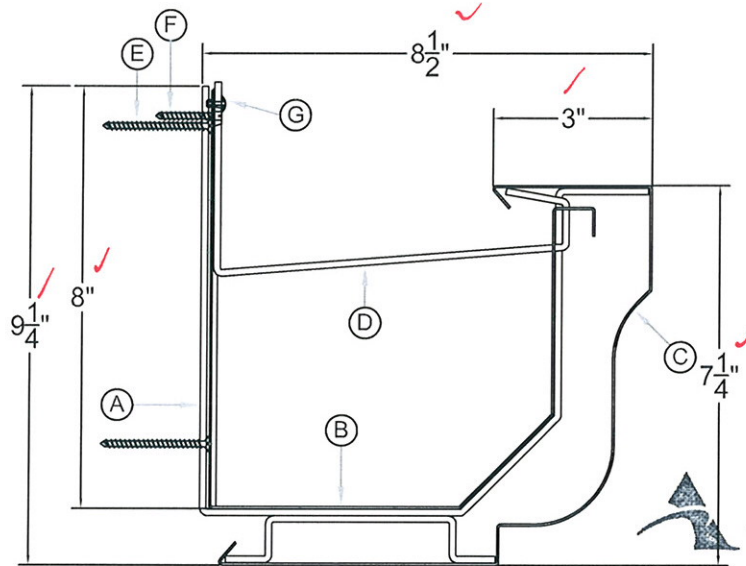
- (A) Heavy duty aluminum support brackets @ 30" centers.
- (B) Liner 10'-0" length, 1" telescoping lap joint.
- (C) Colonial Fascia 10'-0" length with 3/8" expansion reveal joint.
- (D) Heavy duty aluminum interior straps @ 30" centers.
- (E) #10 x 2" S.S. Screw(s) to secure support bracket
- (F) #10 x 1" (if attached to wood studs) or #10 x 3/4" (if attached to metal studs) S.S. Screw(s) through elongated holes (12" centers) to secure liner.
- (G) Aluminum Rivet to secure interior strap to liner.

METAL OPTIONS			FINISH OPTIONS		
METAL	LINER	FASCIA	FINISH	LINER	FASCIA
0.040" Aluminum	●	●	EZ Mix Kynar	●*	●
0.050" Aluminum	●	●	Custom Kynar	●*	●
0.063" Aluminum	●	●	Clear Anodized	●*	●
0.080" Aluminum	●	●	Integral Color Anodized	●*	●
0.090" Aluminum	●	●	Mill Finished	●	●
16 OZ Copper	●	●			

Default selections are in **BOLD**

* Only the interior of the liner is finished

COLONIAL PROFILE
8 Inch Size



MODEL NUMBER
DSC-8

Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # DG544.01-119-16

Date 12-15-14 Tech Ydm

- (A) Heavy duty aluminum support brackets @ 30" centers.
- (B) Liner 10'-0" length, 1" telescoping lap joint.
- (C) Colonial Fascia 10'-0" length with 3/8" expansion reveal joint.
- (D) Heavy duty aluminum interior straps @ 30" centers.
- (E) #10 x 2" S.S. Screw(s) to secure support bracket
- (F) #10 x 1" (if attached to wood studs) or #10 x 3/4" (if attached to metal studs) S.S. Screw(s) through elongated holes (12" centers) to secure liner.
- (G) Aluminum Rivet to secure interior strap to liner.

METAL OPTIONS			FINISH OPTIONS		
METAL	LINER	FASCIA	FINISH	LINER	FASCIA
0.040" Aluminum	●	●	EZ Mix Kynar	● *	●
0.050" Aluminum	●	●	Custom Kynar	● *	●
0.063" Aluminum	●	●	Clear Anodized	● *	●
0.080" Aluminum	●	●	Integral Color Anodized	● *	●
0.090" Aluminum	●	●	Mill Finished	●	●
16 OZ Copper	●	●			

Default selections are in **BOLD**

* Only the interior of the liner is finished

Industrial Series Profile G4-R9

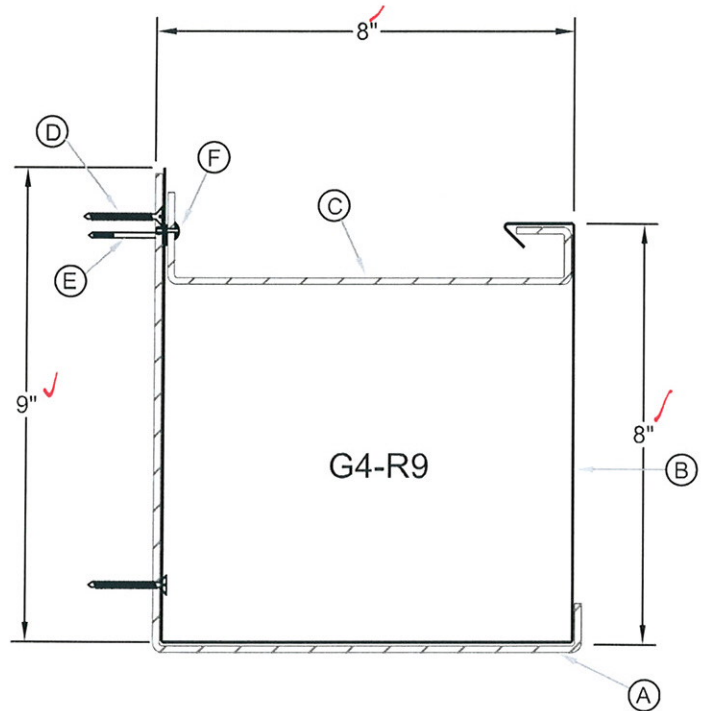
- (A) Heavy duty support brackets @ 30" centers.
- (B) Gutter Profile 10' length, 1" telescoping joints.
- (C) Heavy duty interior straps @ 30" centers.

- (D) #10 x 2" S.S. wood screw(s)
- (E) #10 x 1" (if attached to wood studs) or #10 x 3/4" (if attached to metal studs) S.S. Screw(s) through elongated holes (12" centers) to secure liner.
- (F) Aluminum Rivet to secure interior strap to liner.

METAL OPTIONS		
METAL	GUTTER	BRACKET
0.040" Aluminum	●	
0.050" Aluminum	●	
0.063" Aluminum	●	
0.080" Aluminum	●	
0.090" Aluminum	●	
0.125" Aluminum	●	●

FINISH OPTIONS		
FINISH	BRACKET	FASCIA
EZ Mix Kynar	●	●
Custom Kynar	●	●
Clear Anodized	●	●
Integral Color Anodized	●	●
Mill Finished	●	●

Default selections are in **BOLD**



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # D6544.01-119-16

Date 12-15-14 Tech y-hu

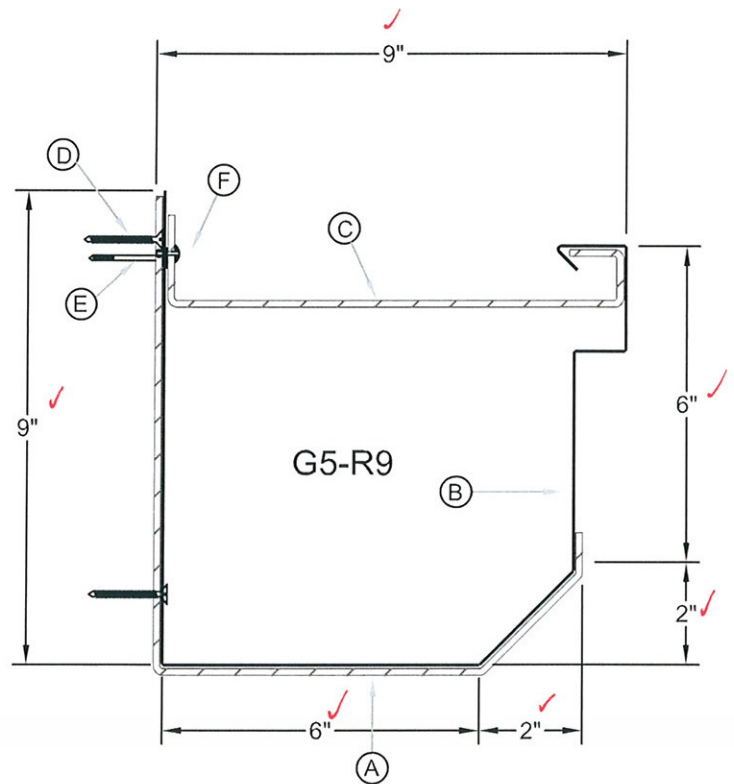
Industrial Series Profile G5-R9

- (A) Heavy duty support brackets @ 30" centers.
- (B) Gutter Profile 10' length, 1" telescoping joints.
- (C) Heavy duty interior straps @ 30" centers.
- (D) #10 x 2" S.S. wood screw(s)
- (E) #10 x 1" (if attached to wood studs) or #10 x 3/4" (if attached to metal studs) S.S. Screw(s) through elongated holes (12" centers) to secure liner.
- (F) Aluminum Rivet to secure interior strap to liner.

METAL OPTIONS		
METAL	GUTTER	BRACKET
0.040" Aluminum	●	
0.050" Aluminum	●	
0.063" Aluminum	●	
0.080" Aluminum	●	
0.090" Aluminum	●	
0.125" Aluminum	●	●

FINISH OPTIONS		
FINISH	BRACKET	FASCIA
EZ Mix Kynar	●	●
Custom Kynar	●	●
Clear Anodized	●	●
Integral Color Anodized	●	●
Mill Finished	●	●

Default selections are in **BOLD**



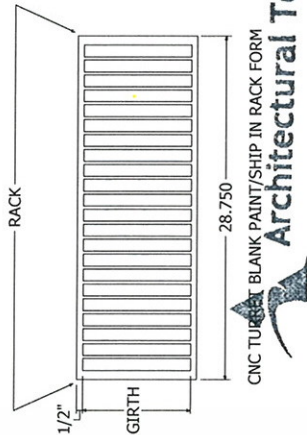
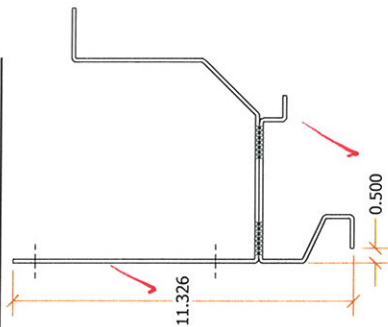
Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06544.01-14-16

Date 12-15-14 Tech AM

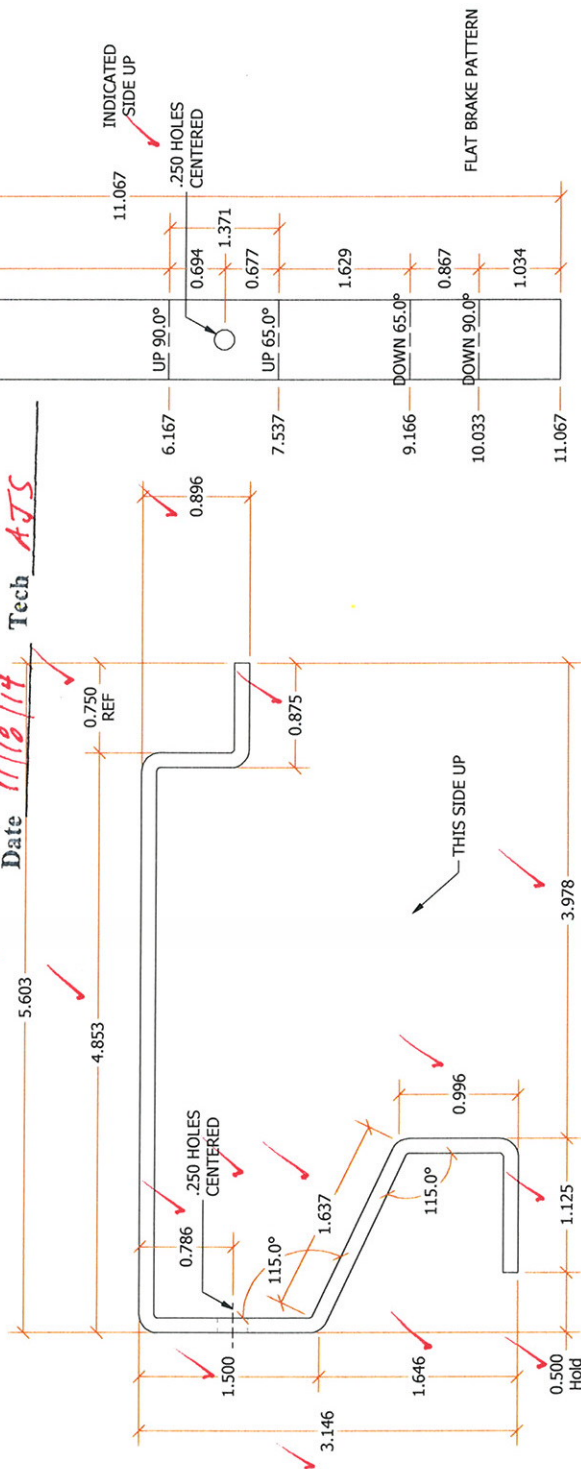
NON STOCK PARTS



Test sample complies with these details.
Deviations are noted.


Report # 76544.01-119-16

Date 11/18/14 Tech AJS



ROUTE TO TURRET

ACTUAL SIZE = 11.067 x 1.000
TURRET BLANK SIZE = 12.067

 Perimeter Systems 130 Chatham Street Sanford, NC 27330 Phone: 919-775-7353 Fax: 919-775-5652	
Material Schedule	Materials Item Value Material: Aluminum Thickness 0.125
Finish Schedule	Finish Item Value Type: Mill Class: Code & Color
Customer Info	Customer Item Value Name: Perimeter System ID per27330
Job Information	Project Item Value Name: Perimeter System R&D Job No.: 67445 Proj. ID: 2074
Drawing Information	Part & Drawing Info Item Value Line: 3~1 Sub Assy (Y/N) Y Part Name: Roman 8 SB (SA) Quantity: 50 Fab Type: 2 Shear Girth: 11.067 Shear Length: 1.000 Date: 5/19/2014 Drawn By: cmf
UNLESS OTHERWISE NOTED: ALL ANGLES ARE 90° DIMENSIONS ARE IN INCHES	

UNLESS OTHERWISE NOTED:
ALL ANGLES ARE 90°
RACK AT HOLES OR SLOTS

Y:\Jobs\2074\Production Dwgs\67445\67445.idw

BRACKET MUST BE TEST FIT WITH
Roman 8 In_36 In Sample (Line 3-2)

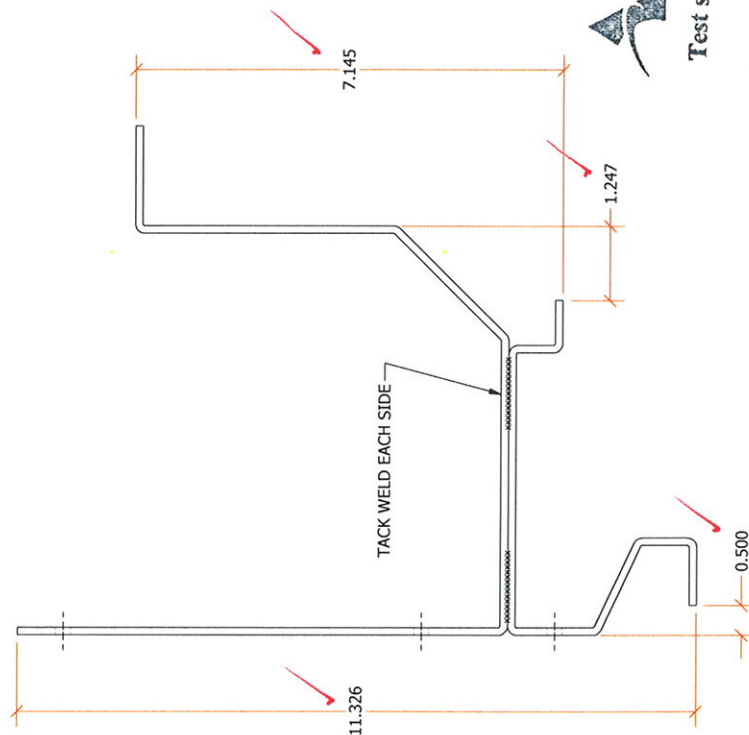
ASSEMBLY DRAWING



139 Chatham Street
Sanford, NC 27330

Material Schedule	Item Material: Thickness	Materials Value
Finish	Item Type: Class: Code & Color	Finish Value
Customer Info	Item Name: Perimeter System ID per27330	Customer Value
Job Information	Item Name: Perimeter System R&D Job No.: 67445 Proj. ID: 2074	Project Value
Uprating Information	Item Line: 3 Sub Assy (Y/N) N Part Name: Roman 8 SB (AD) Quantity: 50 Fab Type: 22 Shear Girth: Shear Length: Date: 5/19/2014 Drawn By: cmf	Part & Drawing Info Value

UNLESS OTHERWISE NOTED:
ALL ANGLES ARE 90°



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06544.01-119-16

Date 11/18/14 Tech AJS

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NON STOCK PARTS

ACTUAL SIZE = 16.965 x 1.000
TURRET BLANK SIZE = 17.965 x 28.750



Architectural Testing

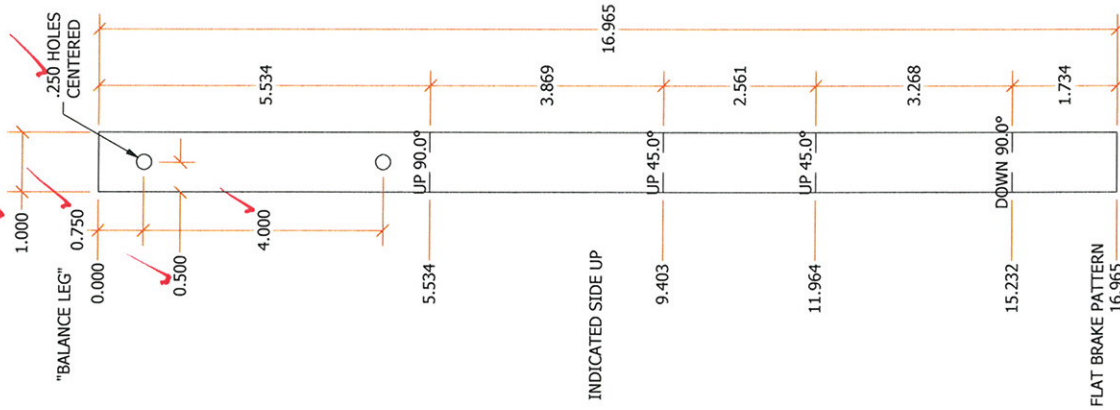
**Test sample complies with these details
Deviations are noted.**


Report #

7/24/10

Date 11/10/11

Date 11/10/17 Tech ATS



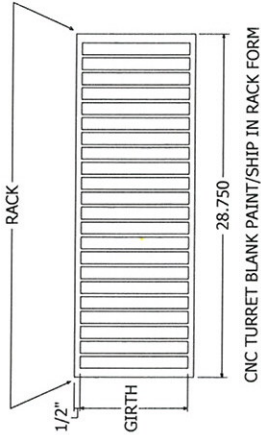
 Perimeter Systems Phone: 919-775-7353 Fax: 919-775-5652		133 Chatham Street Sanford, NC 27330	
Material Schedule	Materials Item Material: Aluminum Thickness: 0.125	Value	
Finish Schedule	Finish Item Type: Mill Class: Code & Color	Value	
Customer Info	Customer Item Name: Perimeter System ID: per27330	Value	
Job Information	Project Item Name: Perimeter System R&D Job No.: 67445 Proj. ID: 2074	Value	
Drawing Information	Part & Drawing Info Item Line: 2~2 Sub Assy (Y/N) Y Part Name: 6 In SB (SA) Quantity: 100 Fab Type: 22 Shear Girth: 16.965 Shear Length: 1.000 Date: 5/19/2014 Drawn By: cmf	Value	
UNLESS OTHERWISE NOTED ALL ANGLES ARE 90° DIMENSIONS ARE IN INCHES			

Y:\Jobs\2074\Production Dwgs\67445\67445.idw

UNLESS OTHERWISE NOTED:
ALL ANGLES ARE 90°
BACK AT HOLES OR SLOTS

**SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design **

NON STOCK PARTS



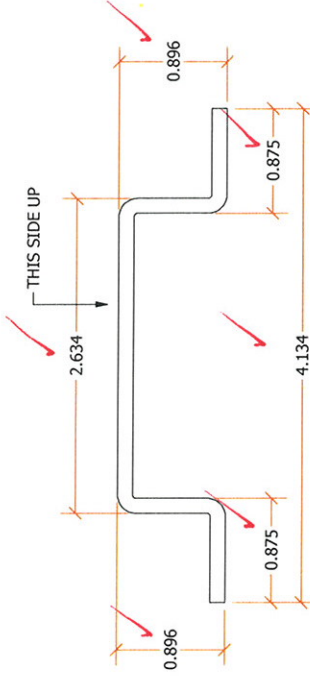
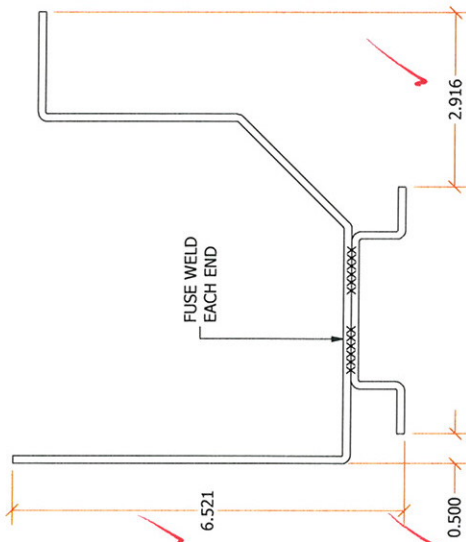
FUSE WELD
EACH END

CNC TURRET BLANK PAINT/SHIP IN RACK FORM



Test sample complies with these details.
Deviations are noted.

Report # D6544-01-119-16
Date 11/18/14 Tech AJS

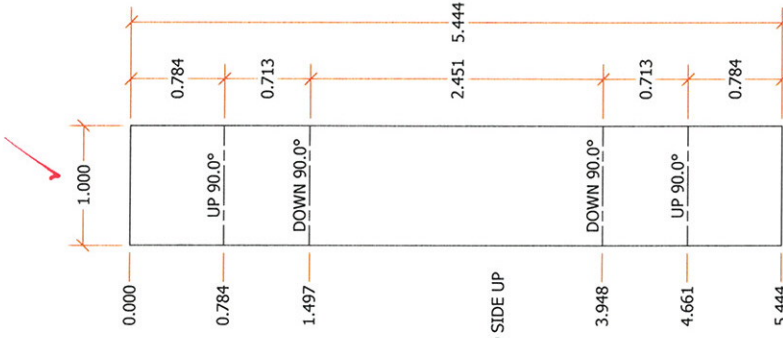


THIS SIDE UP

INDICATED SIDE UP

ROUTE TO TURRET

ACTUAL SIZE = 5.444 x 1.000
TURRET BLANK SIZE = 6.444 x 28.750



FLAT BRAKE PATTERN

SAF Perimeter Systems 139 Chatham Street Sanford, NC 27330 Phone 919-775-7353 Fax 919-775-9552	
Material Schedule	Materials Item: Aluminum Material: Thickness 0.125 Value
Finish Schedule	Finish Item: Mill Type: Value Class: Code & Color
Customer Info	Customer Item: Perimeter System Name: Value ID: per27330
Job Information	Project Item: Perimeter System R&D Name: Value Job No.: 67445 Proj. ID: 2074
Drawing Information	Part & Drawing Info Line: 2~1 Sub Assy (Y/N): Y Part Name: Colonial 6 SB (SA) Quantity: 50 Fab Type: 2 Shear Girth: 5.444 Shear Length: 1.000 Date: 5/19/2014 Drawn By: cmf
UNLESS OTHERWISE NOTED: ALL ANGLES ARE 90° RACK AT HOLES OR SLOTS	

Y:\Jobs\2074\Production Dwg\67445\67445.dwg

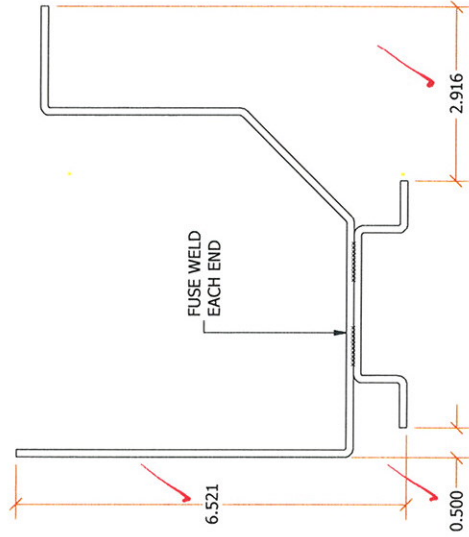
Southern Aluminum Finishing Co., Atlanta, Nashville, Sanford, Winston, Redding

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

BRACKET MUST BE TEST FIT WITH
Colonial 6 in_36 in Sample (Line 2-3)

NON STOCK PARTS

ASSEMBLY DRAWING



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06544-01-117-16

Date 11/18/14 Tech AJS

SAF Perimeter Systems
139 Chatham Street
Sanford, NC 27330
Phone: 919-775-7353
Fax: 919-775-9552

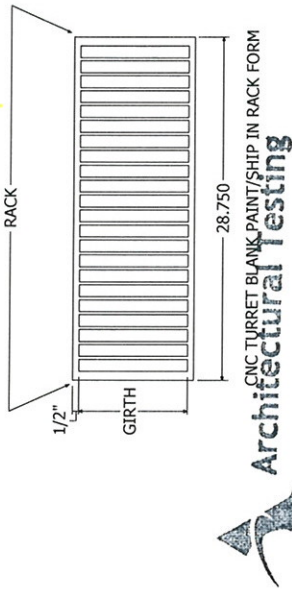
Material Schedule		Item	Materials	Value
		Material:		
		Thickness		
Finish Schedule		Item	Finish	Value
		Type:	Mill	
		Class:		
		Code & Color		
Customer Info		Item	Customer	Value
		Name:	Perimeter System	
		ID	per27330	
Job Information		Item	Project	Value
		Name:	Perimeter System R&D	
		Job No.:	67445	
		Proj. ID:	2074	
Drawing Information		Item	Part & Drawing Info	Value
		Line:	2	
		Sub Assy (Y/N)	N	
		Part Name:	Colonial 6 SB (AD)	
		Quantity:	50	
		Fab Type:	22	
		Shear Girth:		
		Shear Length:		
		Date:	5/19/2014	Drawn By:
				cmf
UNLESS OTHERWISE NOTED ALL ANGLES ARE 90° RACK AT HOLES OR SLOTS				

Y:\Jobs\2074\Production Dwg\67445\67445.dwg

Southern Aluminum Finishing Co., Atlanta, Nashville, Sanford, Winston, Redding

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

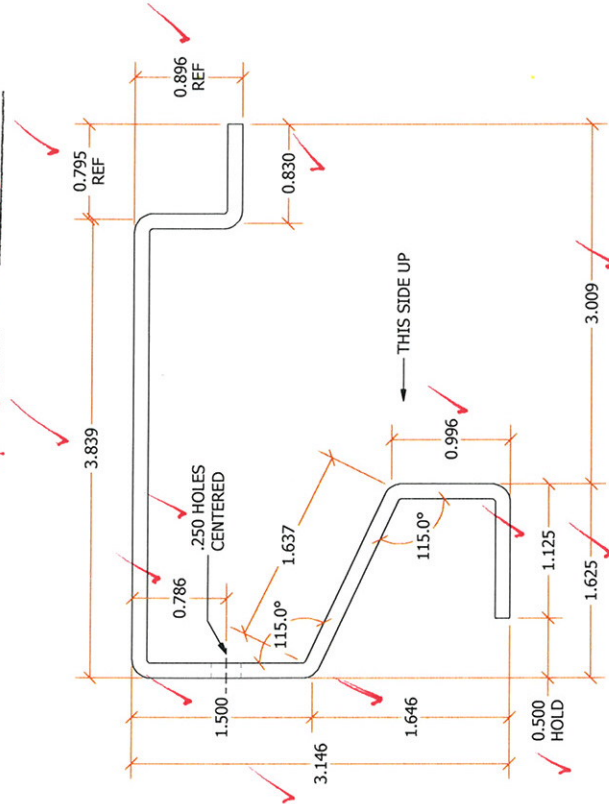
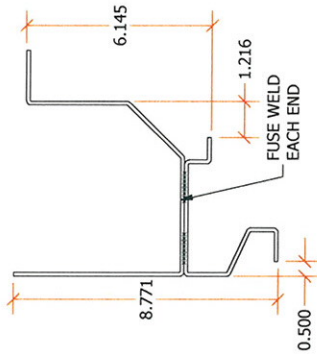
NON STOCK PARTS



Test sample complies with these details.
Deviations are noted.

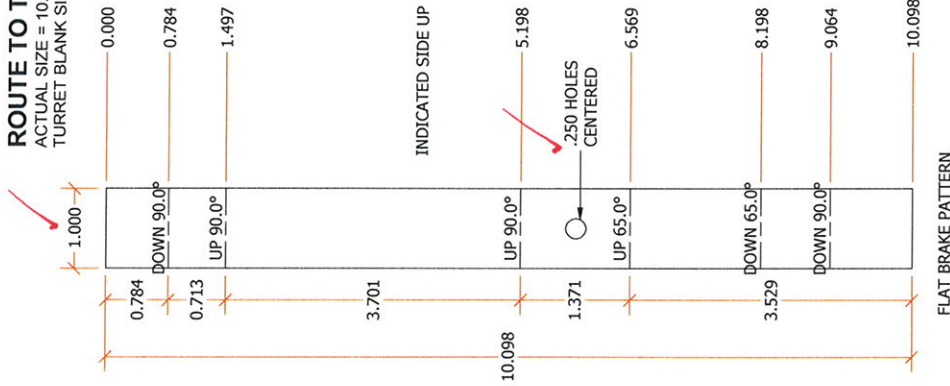
Report # 06544-01-119-16

Date 11/18/14 Tech AVS



ROUTE TO TURRET

ACTUAL SIZE = 10.098 x 1.000
TURRET BLANK SIZE = 11.098 x 28.750



SAF Perimeter Systems
138 Chatham Street
Spartanburg, SC 29303
Phone: 815-775-7353
Fax: 815-775-9552

Item	Material	Value
Thickness	Aluminum	0.125

Item	Finish	Value
Type: Mill		
Class: Code & Color		

Item	Customer	Value
Name: Perimeter System		
ID: per27330		

Item	Project	Value
Name: Perimeter System R&D		
Job No.: 67445		
Proj. ID: 2074		

Item	Part & Drawing Info	Value
Line: 1~1		
Sub Assy (Y/N): Y		
Part Name: Roman 6 SB (SA)		
Quantity: 50		
Fab Type: 2		
Shear Girth: 10.098		
Shear Length: 1.000		
Date: 5/19/2014		
Drawn By: cmf		

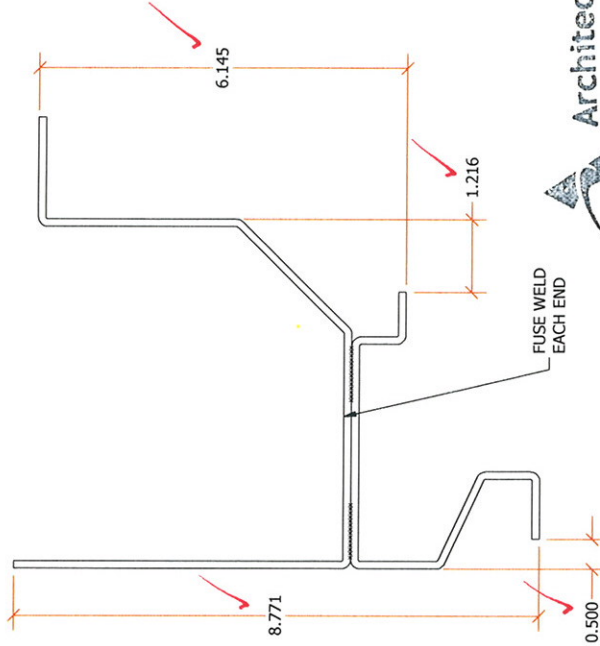
UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE
IN INCHES DECIMALS

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

BRACKET MUST BE TEST FIT WITH
Roman 6 In₃₆ in Sample (Line 1-2)

NON STOCK PARTS

ASSEMBLY DRAWING



Test sample complies with these details.
Deviations are noted.

Report # 06544-01-119-06

Date 11/18/14 Tech ATS

SAF Perimeter Systems
139 Chatham Street
Spartanburg, SC 29303
Phone: 919-775-7353
Fax: 919-775-5652

Material Schedule	
Item	Value
Material:	
Thickness:	

Finish Schedule	
Item	Value
Type:	Mill
Class:	
Code & Color	

Customer Info	
Item	Value
Name:	Perimeter System
ID	per27330

Job Information	
Item	Value
Name:	Perimeter System R&D
Job No.:	67445
Proj. ID:	2074

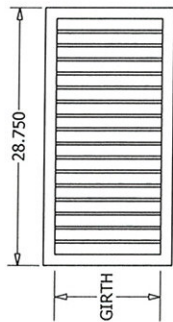
Drawing Information	
Item	Value
Line:	1
Sub Assy (Y/N)	N
Part Name:	Roman 6 SB (AD)
Quantity:	50
Fab Type:	22
Shear Girth:	0.000
Shear Length:	0.000
Date:	5/19/2014
Drawn By:	cmf

UNLESS OTHERWISE NOTED
ALL ANGLES ARE BY
QUOTATION MARKS

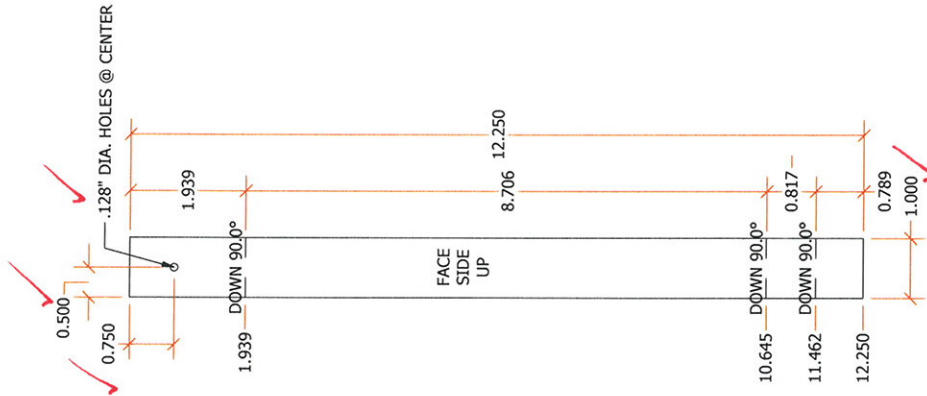
Y:\Jobs\2074\Production Drawings\67445\67445.dwg

Southern Aluminum Finishing Co., Atlanta, Nashville, Sanford, Winston, Redding

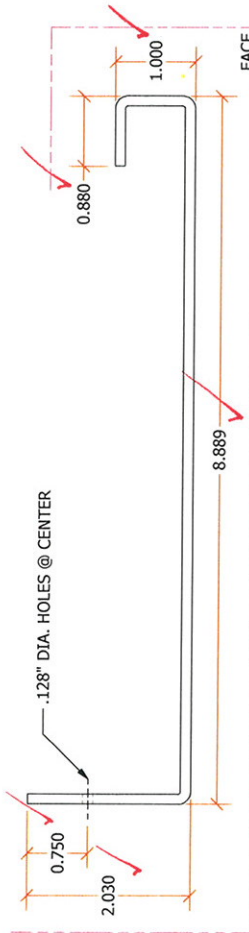
SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.



ACTUAL SIZE = 12.250 x 1.000
TURRET BLANK SIZE = 13.250 x 28.750
ROUTE TO TURRET



FLAT BRAKE PATTERN



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06544-01-119-16
Date 11/18/17 Tech ATS

SAF Perimeter Systems
8370 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule	
Item	Value
Material:	Aluminum
Thickness	0.040

Finish Schedule	
Item	Value
Type:	Mill
Class:	
Code & Color	

Customer Info	
Item	Value
Name:	Perimeter System
ID	per27330

Job Information	
Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Part & Drawing Info	
Item	Value
Line:	18
Sub Assy (Y/N)	N
Part Name:	G5R8 IS
Quantity:	40
Fab Type:	2
Shear Girth:	12.250
Shear Length:	1.000
Date:	4/10/2014
Drawn By:	wec

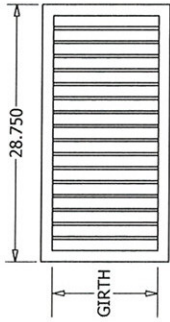
ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED

\\RUSKJobs\2074\Production Dwg\67413\67413.dwg

Southern Aluminum Finishing Co., Atlanta, Nashville, Winston, Redding

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS



TEST FIT BRACKET
WITH GUTTER BODY

FINISH IN BLANK FORM
DO NOT BRAKE INTO INDIVIDUAL PIECES

Job & Line #
(Scribe)

.250" DIA. HOLES @ CENTER

0.750

6.000

9.125

2.375



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06544.01-119-16

Date 11/18/17 Tech ATS

.250" DIA. HOLES @ CENTER

8.116

REF

1.250

8.366

FACE

FINISH AREA

ACTUAL SIZE = 18.375 x 1.000
TURRET BLANK SIZE = 19.375 x 28.750

ROUTE TO TURRET

.250" DIA. HOLES @ CENTER

0.500

0.750

6.000

9.034

18.375

9.034

DOWN 90.0°

FACE

SIDE

UP

8.183

17.216

DOWN 90.0°

1.159

18.375

1.000

FLAT BRAKE PATTERN

SAF Perimeter Systems
6310 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule	
Item	Value
Material:	Aluminum
Thickness	0.040

Finish Schedule	
Item	Value
Type:	Mill
Class:	
Code & Color	

Customer Info	
Item	Value
Name:	Perimeter System
ID	per27330

Job Information	
Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

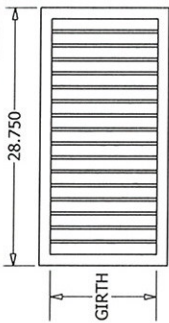
Part & Drawing Info	
Item	Value
Line:	16
Sub Assy (Y/N)	N
Part Name:	G4R9 SB
Quantity:	50
Fab Type:	2
Shear Girth:	18.375
Shear Length:	1.000
Date:	4/10/2014
Drawn By:	wec

ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED

\\RUSKJobs\2074\Production Dwg\67413\67413.dwg

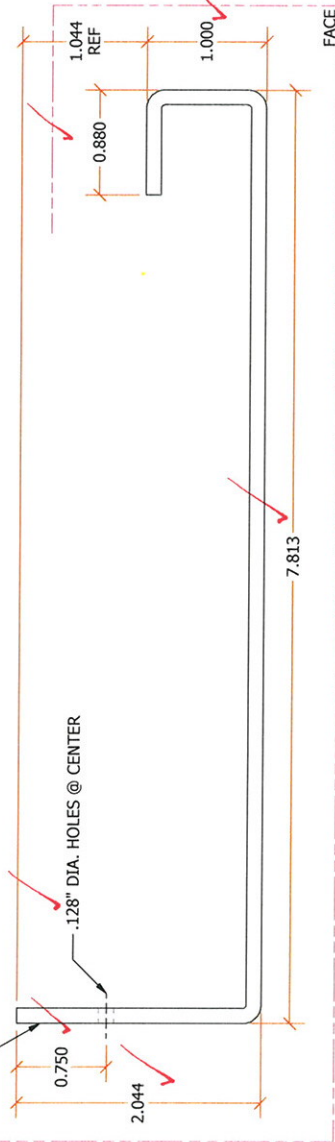
SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS



DO NOT BRAKE INTO INDIVIDUAL PIECES

Job & Line #
(Scribe)

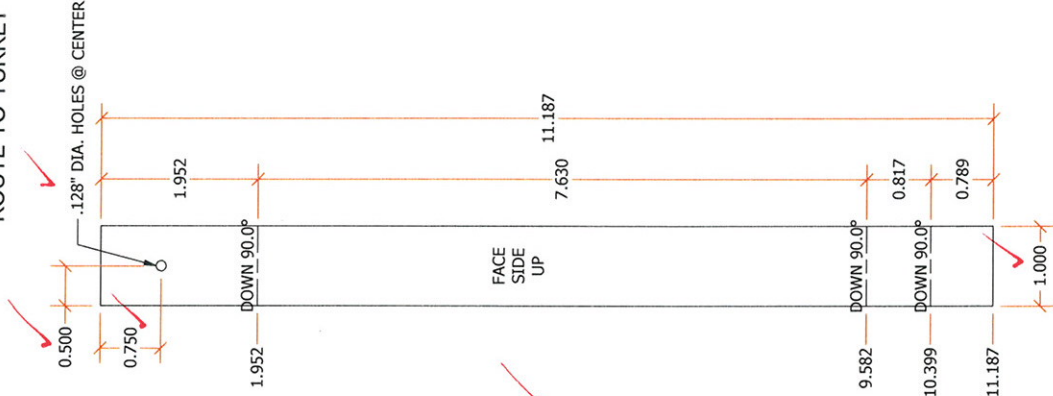


Test sample complies with these details.
Deviations are noted.

Report # 06544.01-119-16

Date 11/18/14 Tech AJS

ACTUAL SIZE = 11.187 x 1.000
TURRET BLANK SIZE = 12.187 x 28.750
ROUTE TO TURRET



FLAT BRAKE PATTERN

SAF Perimeter Systems
8370 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule	
Item	Value
Material:	Aluminum
Thickness	0.040

Finish Schedule	
Item	Value
Type:	Mill
Class:	
Code & Color	

Customer Info	
Item	Value
Name:	Perimeter System
ID	per27330

Job Information	
Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Drawing Information	
Item	Value
Line:	15
Sub Assy (Y/N)	N
Part Name:	G4R9 IS
Quantity:	40
Fab Type:	2
Shear Girth:	11.187
Shear Length:	1.000
Date:	4/10/2014
Drawn By:	wec

ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED

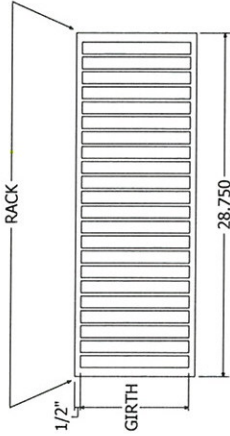
\\RUSK\Jobs\2074\Production Dwg\67413\67413.dwg

Southern Aluminum Finishing Co., Atlanta, Nashville, Winston, Reeding

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS

ROUTE TO TURRET
ACTUAL SIZE = 9.614 x 1.000
TURRET BLANK SIZE = 10.614 x 28.750



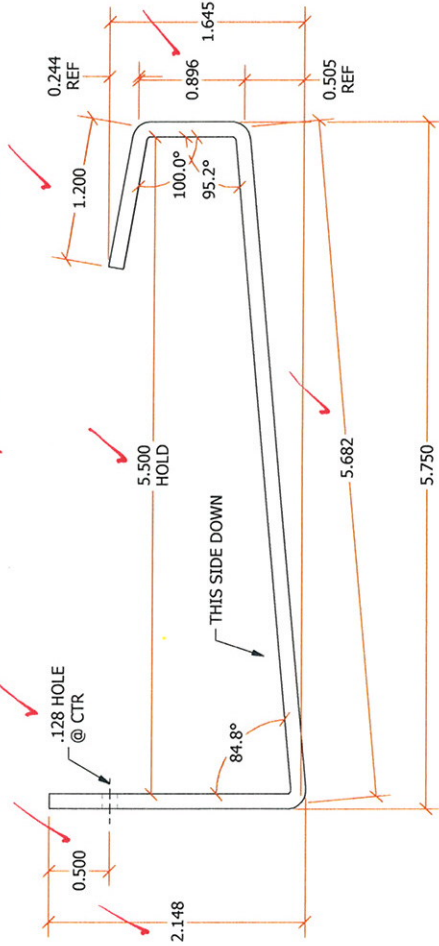
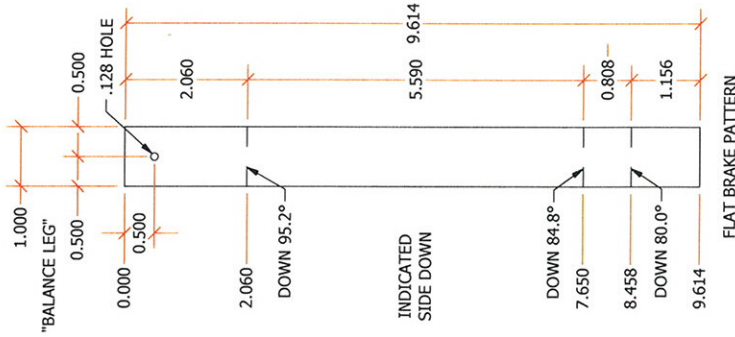
CNC TURRET BLANK PAINT/SHIP IN RACK FORM



Test sample complies with these details.
Deviations are noted.

Report # 06544.01-119-16

Date 11/18/14 Tech ATJ



SAF Perimeter Systems

6370 Hwy 78
Villa Rica, GA 30180
Phone 770-942-1207
Fax 770-942-4173

Item	Value
Material:	Aluminum
Thickness:	0.125

Item	Value
Type:	Mill
Class:	Code & Color

Item	Value
Name:	Perimeter System
ID	per27330

Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

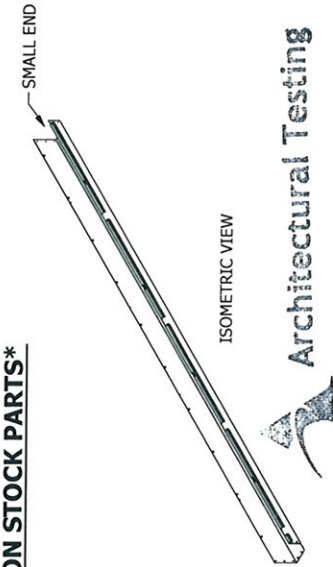
Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

\\RUSKJobs\2074\Production Dwg\67413\67413.dwg

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS



Architectural Testing

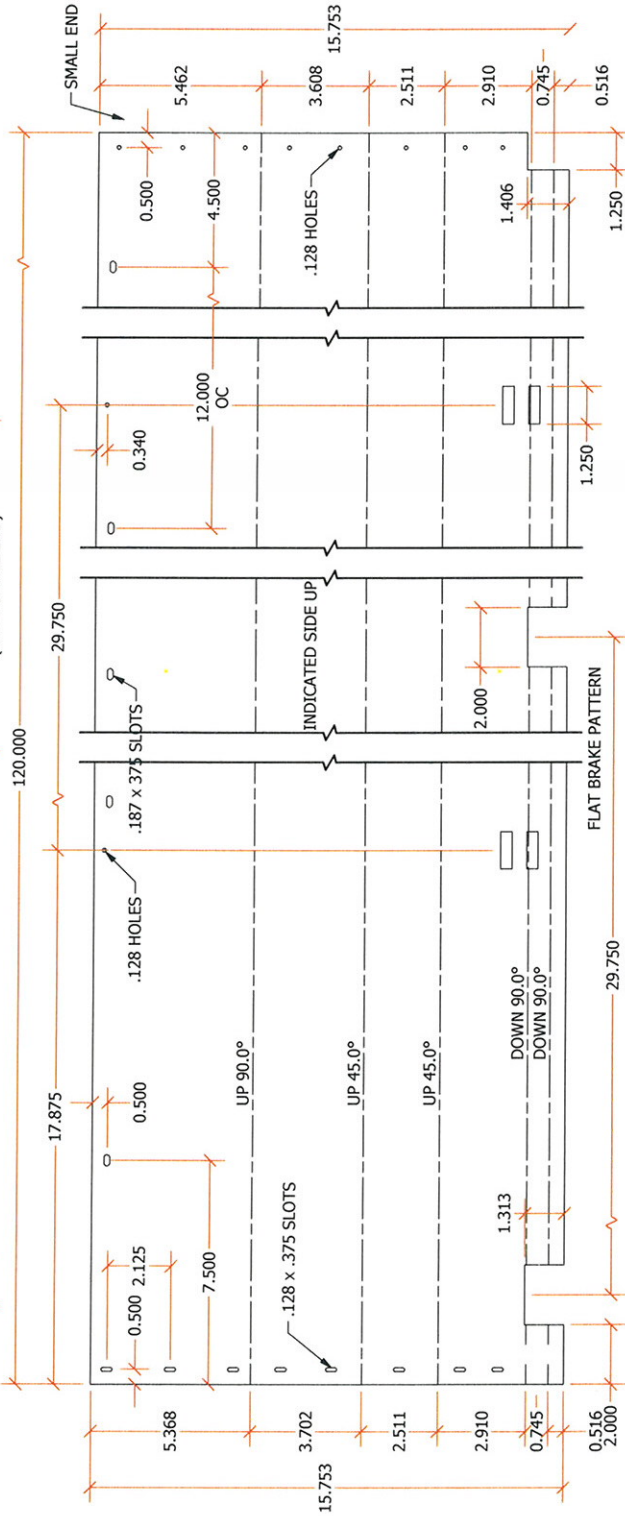
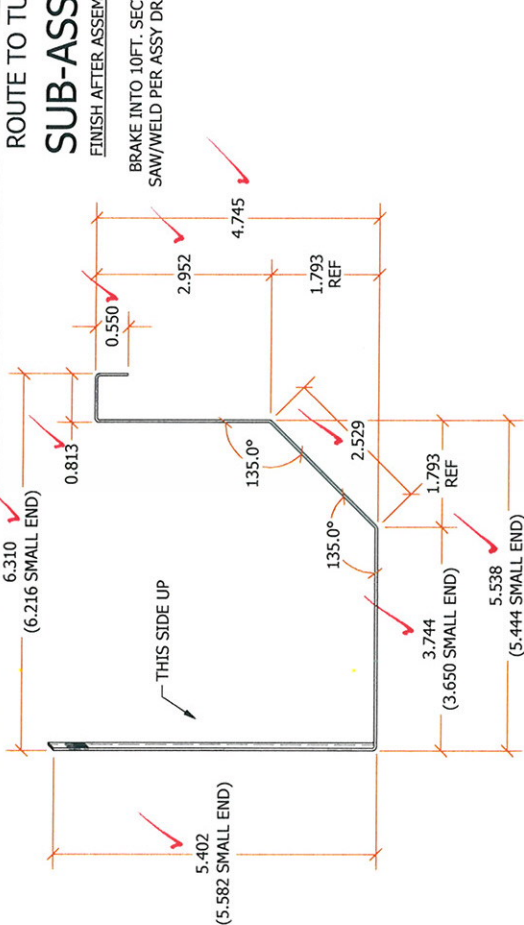
Test sample complies with these details.
Deviations are noted.

Report # D6544.01-119-16
Date 11/18/14 Tech ATS

**ROUTE TO TURRET
SUB-ASSY**

FINISH AFTER ASSEMBLY

BRAKE INTO 10FT. SECTIONS
SAW/WELD PER ASSY DRAWINGS



SAF Perimeter Systems
6370 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule	Item	Material	Value
	Thickness	Aluminum	0.040

Finish Schedule	Item	Finish	Value
	Type:	Mill	
	Class:		
	Code & Color		

Customer Info	Item	Customer	Value
	Name:	Perimeter System	
	ID	per27330	

Job Information	Item	Project	Value
	Name:	Perimeter System R&D	
	Job No.:	67413	
	Proj. ID:	2074	

Drawing Information	Item	Part & Drawing Info	Value
	Line:	5~1	
	Sub Assy (Y/N)	Y	
	Part Name:	Liner 6"	
	Quantity:	20	
	Fab Type:	2	
	Shear Girth:	15.753	
	Shear Length:	120.000	
	Date:	4/10/2014	
	Drawn By:	wec	

ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED

\\RUSKJobs\2074\Production Dwg\67413\67413.dwg

Southern Aluminum Finishing Co., Atlanta, Nashville, Winston, Redding

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

*** NON STOCK PARTS ***

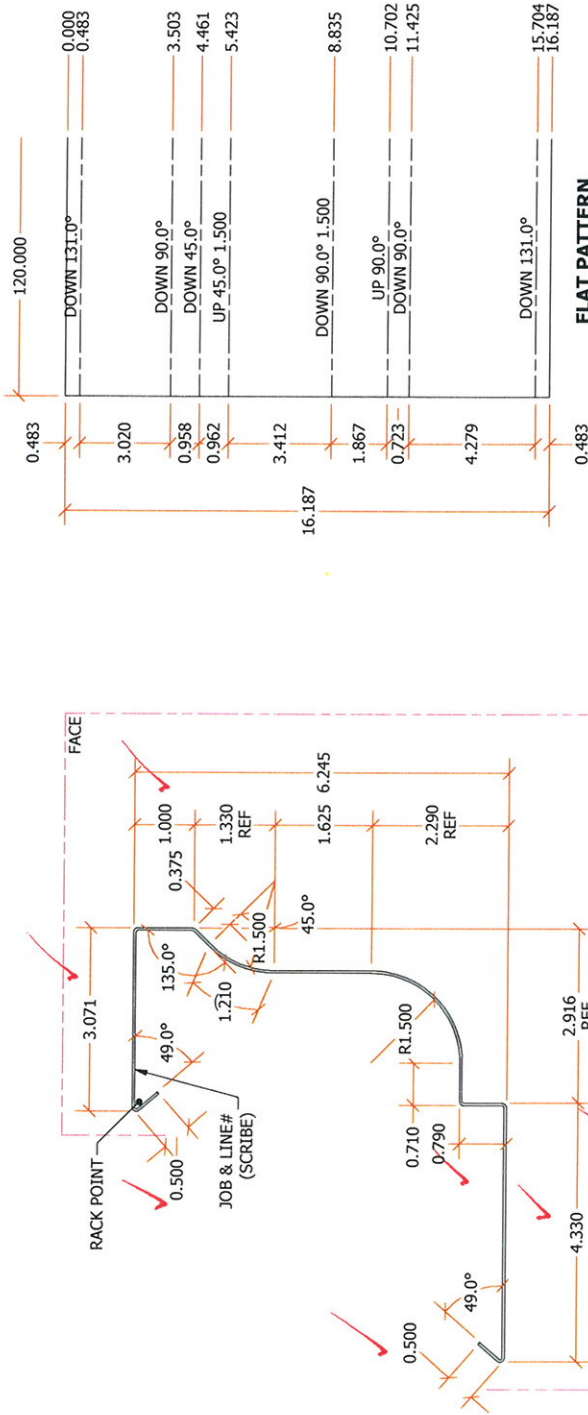


Architectural Testing

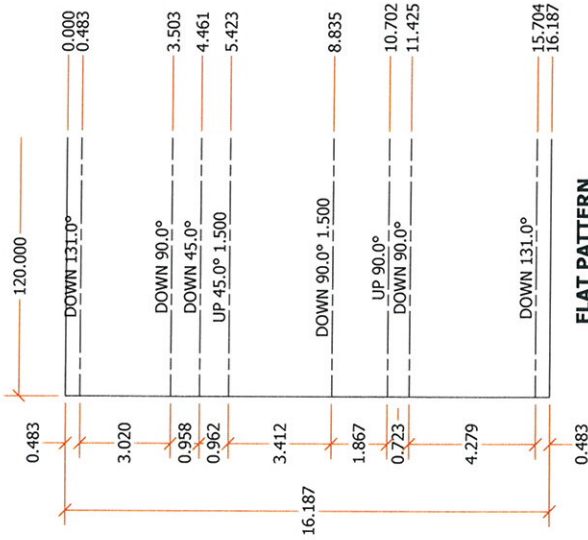
Test sample complies with these details.
Deviations are noted.

Report # D6544.01-119-16

Date 11/18/14 Tech AJS



FLAT PATTERN TAPE UP



6370 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule	Item	Materials	Value
	Material:	Aluminum	
	Thickness:	0.040	

Finish Schedule	Item	Finish	Value
	Type:	Mill	
	Class:		
	Code & Color		

Customer Info	Item	Customer	Value
	Name:	Perimeter System	
	ID	per27330	

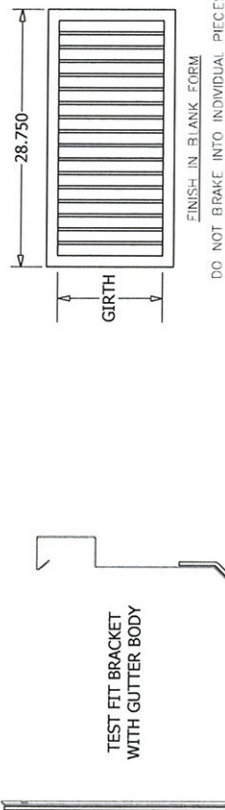
Job Information	Item	Project	Value
	Name:	Perimeter System R&D	
	Job No.:	67413	
	Proj. ID:	2074	


Drawing Information	Item	Part & Drawing Info	Value
	Line:	3	
	Sub Assy (Y/N)	N	
	Part Name:	Colonial 6"	
	Quantity:	10	
	Fab Type:	2	
	Shear Girth:	16.187	
	Shear Length:	120.000	
	Date:	4/10/2014	
	Drawn By:	wec	

ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED

\\RUSKJobs\2074\Production Dwg\67413\67413.dwg

ACTUAL SIZE = 19.250 x 1.000
TURRET BLANK SIZE = 20.250 x 28.750
ROUTE TO TURRET



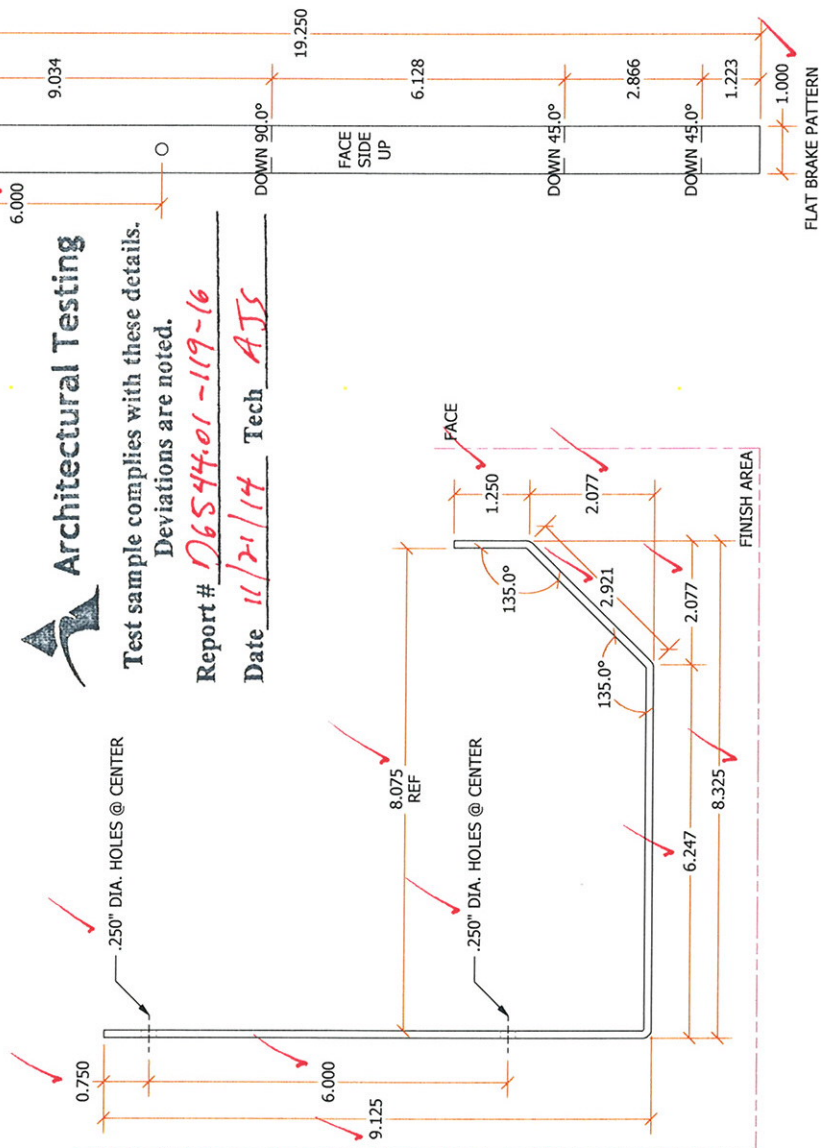
 Architectural Testing

Test sample complies with these details.


Deviations are noted.

Report # D6544.01-119-16

Date 11/24/14 Tech AJS



FLAT BRAKE PATTERN

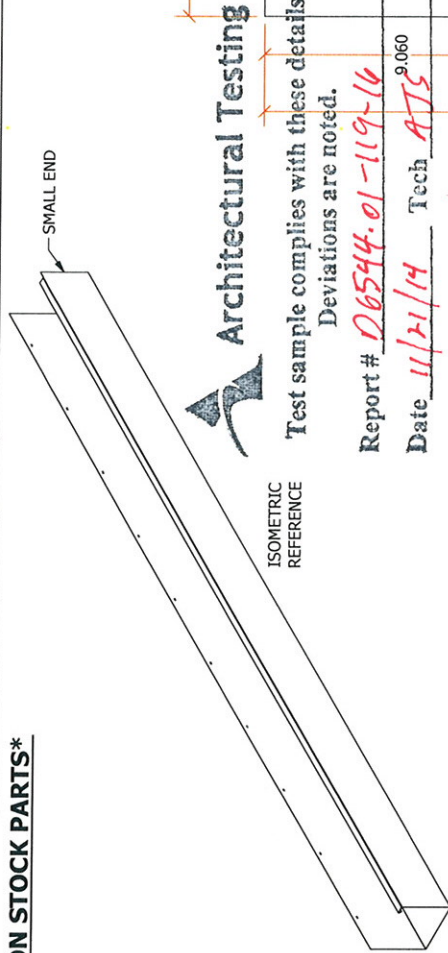
 Perimeter Systems 8370 Hwy 78 Villa Rica, GA 30180 Phone: 770-942-1207 Fax: 770-942-4173		Materials Item: Value Material: Aluminum Thickness: 0.040	
Material Schedule		Finish Item: Value Type: Mill Class: Code & Color	
Customer Info		Customer Item Name: Perimeter System ID: per27330	
Job Information		Project Item Name: Perimeter System R&D Job No.: 67413 Proj. ID: 2074	
Drawing Information		Part & Drawing Info Item: 19 Line: Sub Assy (Y/N) N Part Name: GSR9 SB Quantity: 50 Fab Type: 2 Shear Girth: 19,250 Shear Length: 1,000 Date: 4/10/2014 Drawn By: wec	
ALL ANGLES ARE 90° OTHERWISE NOTED RACK AT HOLES OR SLOTS OTHERWISE NOTED			

ALL ANGLES ARE 90° OTHERWISE NOTED
 JACK AT HOLES OR SLOTS OTHERWISE NOTED

\\RUSK\Jobs\2074\Production Dwgs\67413\67413.idw

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS



ISOMETRIC
REFERENCE



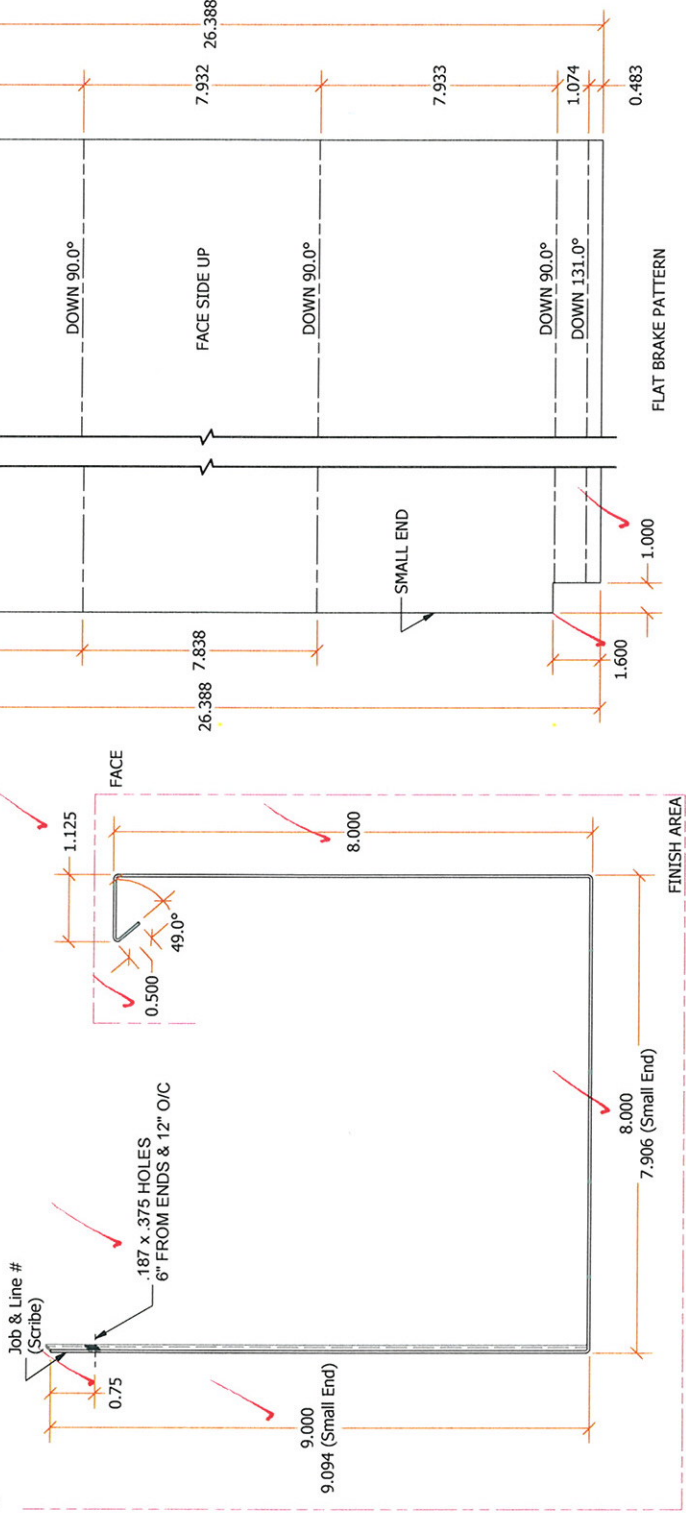
Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # D6544-01-119-16

Date 11/21/14 Tech ATS

9.060



SUB-ASSY

FINISH AFTER ASSEMBLY

BRAKE INTO 10FT. SECTIONS
SAW/WELD PER ASSY DRAWINGS



5370 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule	
Item	Value
Material:	Aluminum
Thickness	0.040

Finish Schedule	
Item	Value
Type:	Mill
Class:	
Code & Color	

Customer Info	
Item	Value
Name:	Perimeter System
ID	per27330

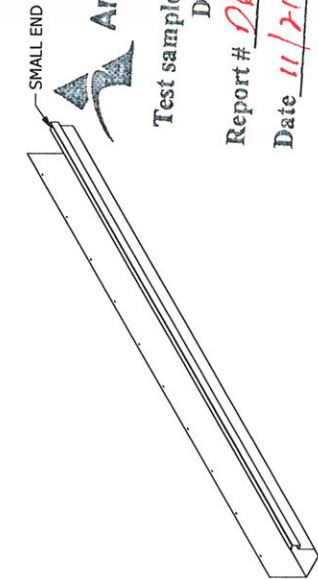
Job Information	
Item	Value
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Drawing Information	
Item	Value
Line:	14~1
Sub Assy (Y/N)	Y
Part Name:	G4R9
Quantity:	10
Fab Type:	2
Shear Girth:	26.388
Shear Length:	120.000
Date:	4/10/2014
Drawn By:	WEC

ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED

\\RUSK\Jobs\2074\Production Dwg\67413\67413.dwg

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.



Architectural Testing

Test sample complies with these details.
Deviations are noted.

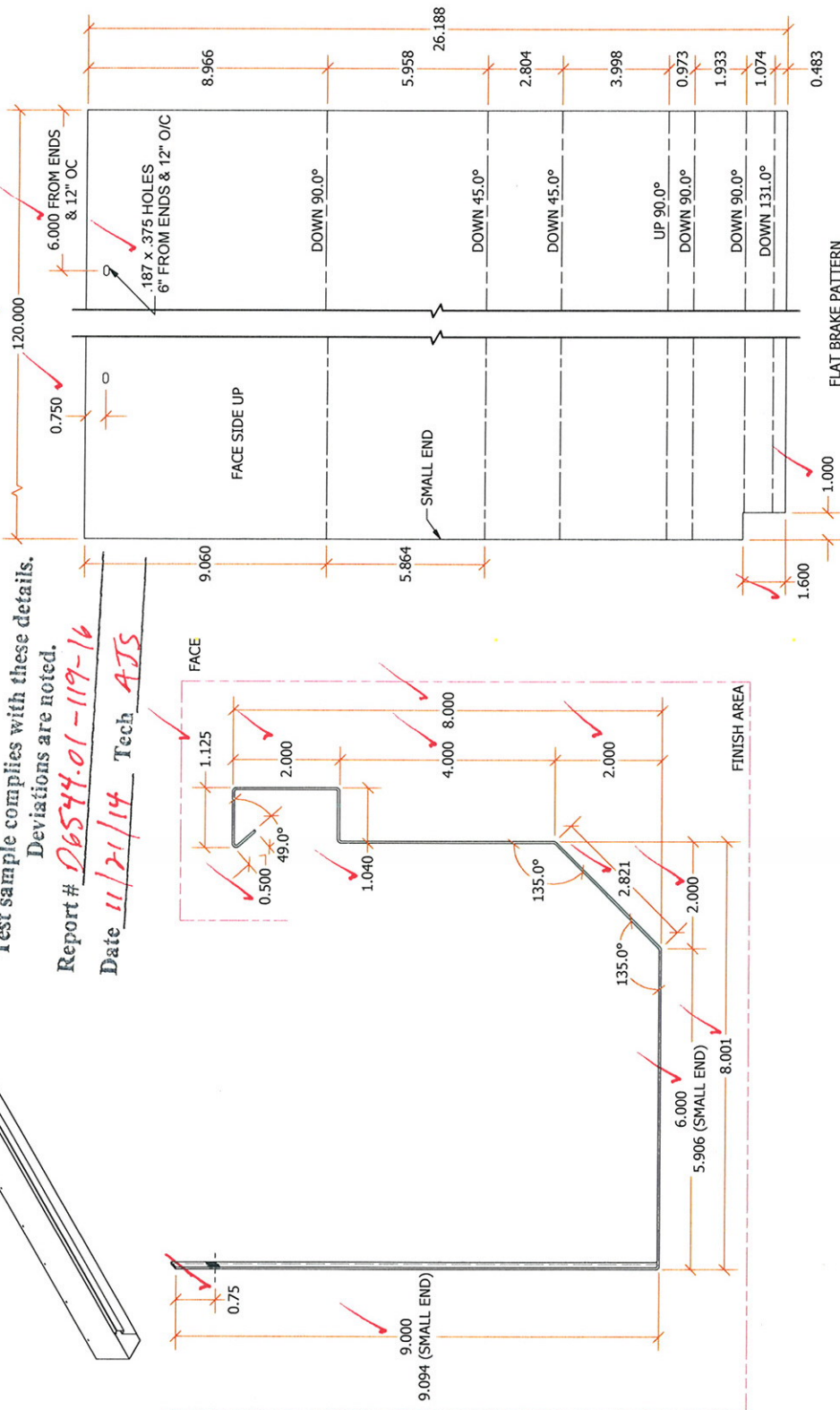
Report # *06544-01-119-16*

Date *11/21/14* Tech *AJS*

SUB-ASSY

FINISH AFTER ASSEMBLY

BRAKE INTO 10FT. SECTIONS
SAW/WELD PER ASSY DRAWINGS



SAF Perimeter Systems

5370 Hwy 75
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule	Item	Material	Value
	Thickness	Aluminum	0.040

Finish Schedule	Item	Finish	Value
	Type: Mill	Mill	
	Class: Code & Color		

Customer Info	Item	Customer	Value
	Name: Perimeter System	Perimeter System	
	ID: per27330		

Job Information	Item	Project	Value
	Name: Perimeter System R&D	Perimeter System R&D	
	Job No.: 67413		
	Proj. ID: 2074		

Drawing Information	Item	Part & Drawing Info	Value
	Line: 17~1	17~1	
	Sub Assy (Y/N): Y	Y	
	Part Name: G5R9	G5R9	
	Quantity: 10	10	
	Fab Type: 2	2	
	Shear Girth: 26.188	26.188	
	Shear Length: 120.000	120.000	
	Date: 4/10/2014		
	Drawn By: WEC		

ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED

\\RUSKJobs\2074\Production Dwg\67413\67413.dwg

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

BRACKET MUST BE TEST FIT WITH
Colonial 8 in .36 in Sample (Line 4-3)

NON STOCK PARTS



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06544-01-119-16

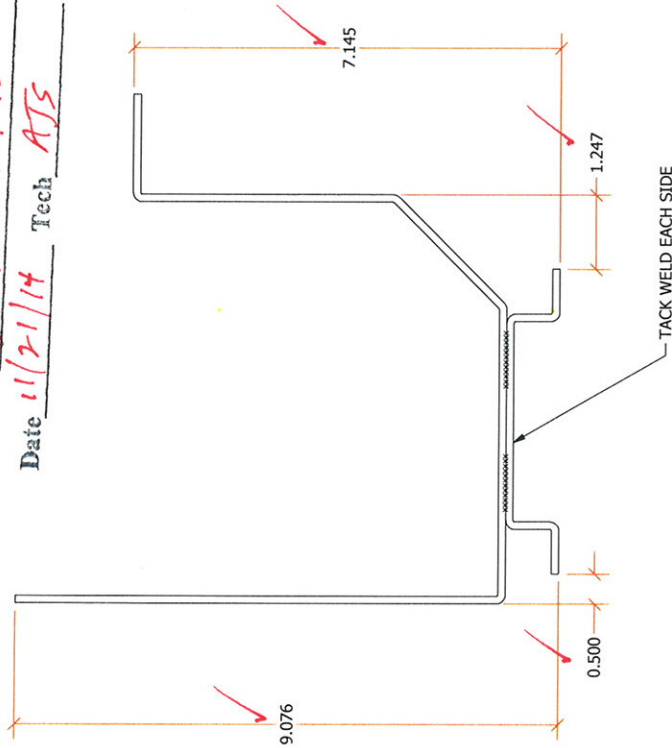
Date 11/21/14 Tech ATS

ASSEMBLY DRAWING

SAF Perimeter Systems
139 Claitor Street
Sanford, NC 27330
Phone: 919-775-7353
Fax: 919-775-9652

Material Schedule	Item Material: Thickness	Materials Value
Finish Schedule	Item Type: Class: Code & Color	Finish Mill Value
Customer Info	Item Name: Perimeter System ID per27330	Customer Value Perimeter System
Job Information	Item Name: Perimeter System R&D Job No.: 67445 Proj. ID: 2074	Project Value Perimeter System R&D
Drawing Information	Line: Sub Assy (Y/N) N Part Name: Colonial 8 SB (AD) Quantity: 50 Fab Type: Shear Girth: Shear Length: Date: 5/19/2014 Drawn By: cmf	Part & Drawing Info Item 4 Value Colonial 8 SB (AD) 50 2

UNLESS OTHERWISE NOTED
ALL ANGLES ARE 90°
BACK TO BACK SYSTEMS



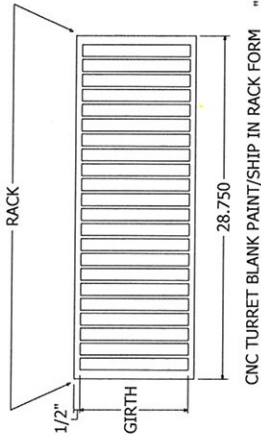
Y:\Jobs\2074\Production Dwg\67445\67445.dwg

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS

ROUTE TO TURRET

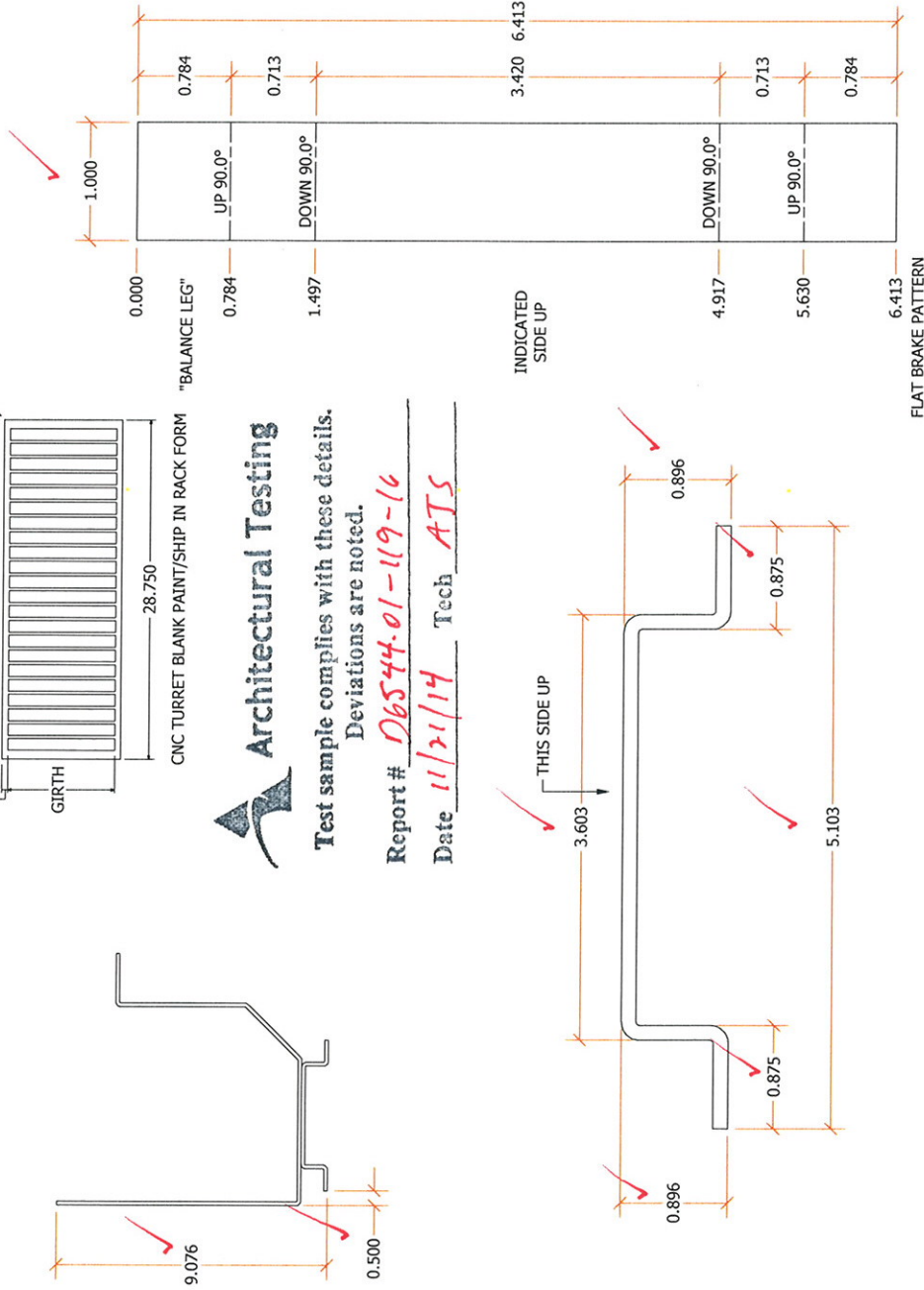
ACTUAL SIZE = 6.413 x 1.000
TURRET BLANK SIZE = 7.413 x 28.750



Test sample complies with these details.
Deviations are noted.

Report # *D6544.01-119-16*

Date *11/21/14* Tech *ATS*



SAF Perimeter Systems
139 Chairman Street
Sanford, NC 27330
Phone: 919-775-7353
Fax: 919-775-5652

Material Schedule	Materials	Item	Value
	Material:	Aluminum	
	Thickness:	0.125	

Finish Schedule	Item	Value
	Type:	Mill
	Class:	
	Code & Color	

Customer Info	Item	Customer
	Name:	Perimeter System
	ID	per27330

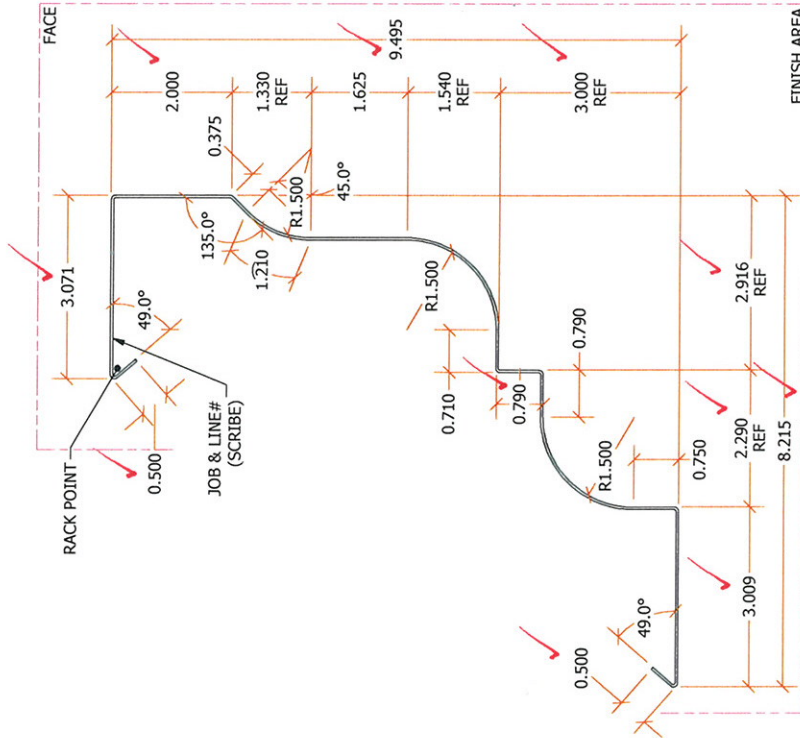
Job Information	Item	Project
	Name:	Perimeter System R&D
	Job No.:	67445
	Proj. ID:	2074

Drawing Information	Item	Part & Drawing Info
	Line:	4-1
	Sub Assy (Y/N)	Y
	Part Name:	Colonail 8 SB (SA)
	Quantity:	50
	Fab Type:	2
	Shear Girth:	6.413
	Shear Length:	1.000
	Date:	5/19/2014
	Drawn By:	cmf

UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES
RACK AT HOLES FOR SLOTS

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS



Architectural Testing
FLAT PATTERN
TAPE UP

Test sample complies with these details.
Deviations are noted.

Report # 06544.01-119-16

Date 11/21/14 Tech AJS

SAF Perimeter Systems
6370 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule		
Item	Material	Value
Thickness	Aluminum	0.040

Finish Schedule		
Item	Finish	Value
Type: Mill		
Class: Code & Color		

Customer Info	
Item Name: Perimeter System	Customer Value
ID: per27330	

Job Information	
Item Name: Perimeter System R&D	Project Value
Job No.: 67413	
Proj. ID: 2074	

Drawing Information	
Line: 2	Part & Drawing Info
Sub Assy (Y/N): N	Value
Part Name: Roman 8"	
Quantity: 10	
Fab Type: 2	
Shear Girth: 19.720	
Shear Length: 120.000	
Date: 4/10/2014	Drawn By: WEC

ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED

\\RUSK\Jobs\2074\Production Dwg\67413\67413.dwg

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS

SAF Perimeter Systems
8370 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Material Schedule	
Item	Materials
Material:	Aluminum
Thickness:	0.040

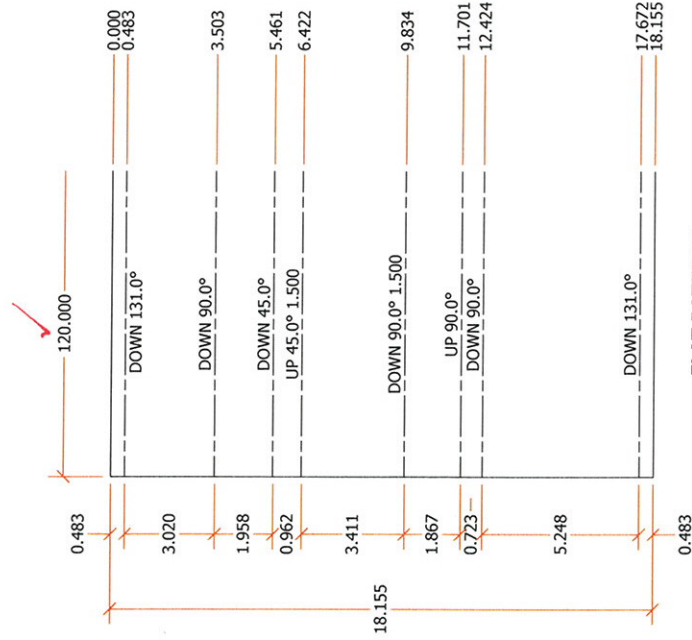
Finish Schedule	
Item	Finish
Type:	Mill
Class:	
Code & Color	

Customer Info	
Item	Customer
Name:	Perimeter System
ID	per27330

Job Information	
Item	Project
Name:	Perimeter System R&D
Job No.:	67413
Proj. ID:	2074

Drawing Information	
Line:	Part & Drawing Info
Sub Assy (Y/N):	4
Part Name:	Colonial 8"
Quantity:	10
Fab Type:	2
Shear Girth:	18.155
Shear Length:	120.000
Date:	4/10/2014
Drawn By:	WEC

ALL ANGLES ARE 90° OTHERWISE NOTED
RACK AT HOLES OR SLOTS OTHERWISE NOTED



Architectural Testing
Test sample complies with these details.
Deviations are noted.
Report # 06544-01-119-16
Date 11/21/14 Tech AJS

\\RUSK\Jobs\2074\Production Dwg\67413\67413.dwg

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS

USE TO TEST FIT COL6SB (LINE 2)

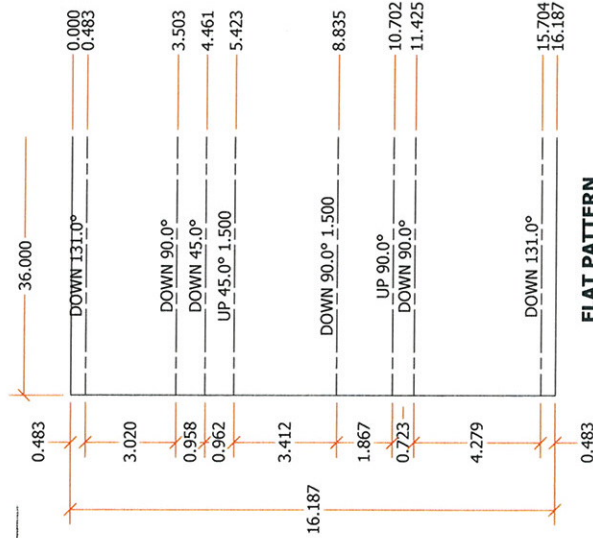
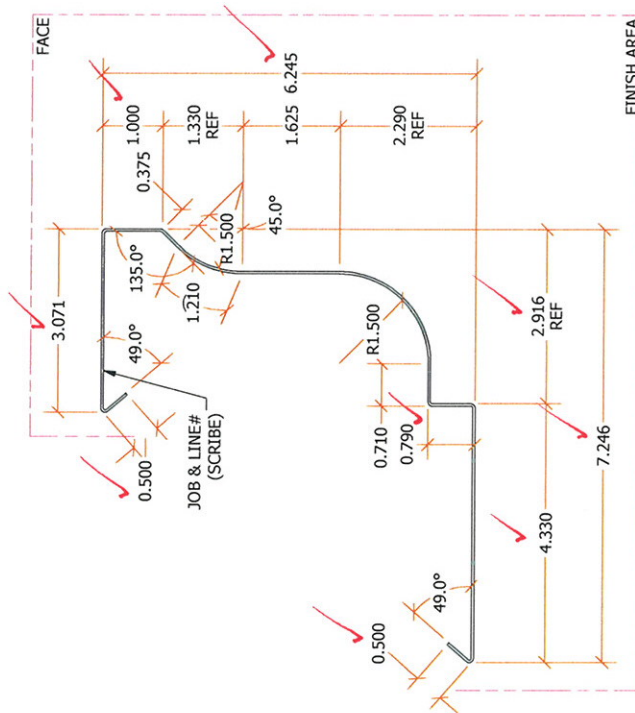


Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06544-01-119-16

Date 11/21/14 Tech AJS



SAF Perimeter Systems

139 Chatham Street
Sanford, NC 27330
Phone: 919-775-7353
Fax: 919-775-5652

Item	Material	Thickness	Value
Material:	Aluminum	0.040	

Item	Finish	Value
Type:	Mill	
Class:	Code & Color	

Item	Customer	Value
Name:	Perimeter System	
ID	per27330	

Item	Project	Value
Name:	Perimeter System R&D	
Job No.:	67445	
Proj. ID:	2074	

Item	Part & Drawing Info	Value
Line:	2~3	
Sub Assy (Y/N)	Y	
Part Name:	Colonial 6"	
Quantity:	1	
Fab Type:	2	
Shear Girth:	16.187	
Shear Length:	36.000	
Date:	5/19/2014	
Drawn By:	cmf	

UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN
INCHES AND DECIMALS THEREOF
SAF-CAT-1353-03-03-03

Y:\Jobs\2074\Production Dwg\67445(67445).dwg

NON STOCK PARTS

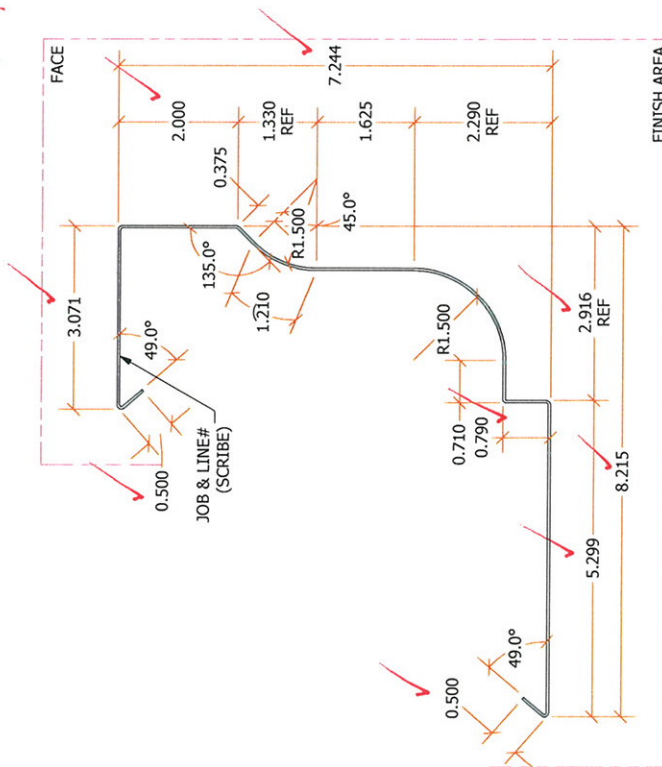



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # D6544-01-119-16

Date 11/21/14 Tech ATS



 Perimeter Systems 130 Crabtree Street Sanford, NC 27330 Phone: 919-775-7353 Fax: 919-775-5652	
Material Schedule	Item Material: Aluminum Thickness: 0.040 Value
Finish Schedule	Item Type: Mill Class: Value Code & Color
Customer Info	Customer Item Name: Perimeter System ID: per27330
Job Information	Project Item Name: Perimeter System R&D Job No.: 67445 Proj. ID: 2074
Drawing Information	Part & Drawing Info Line: Item 4-3 Sub Assy (Y/N) Y Part Name: Colonial 8" Quantity: 10 Fab Type: 2 Shear Girth: 18.155 Shear Length: 36.000 Date: 5/19/2014 Drawn By: cmf
UNLESS OTHERWISE NOTED: ALL ANGLES ARE 90° DIMENSIONS ARE IN INCHES	

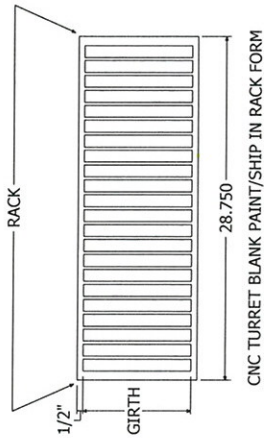
**FLAT PATTERN
TAPE UP**

UNLESS OTHERWISE NOTED:
ALL ANGLES ARE 90°
RACK AT HOLES OR SLOTS

Y:\Jobs\2074\Production Dwg\67445\67445.idw

NON STOCK PARTS

ROUTE TO TURRET
ACTUAL SIZE = 12.161 x 1.000
TURRET BLANK SIZE = 13.161 x 28.750



CNC TURRET BLANK PAINT/SHIP IN RACK FORM

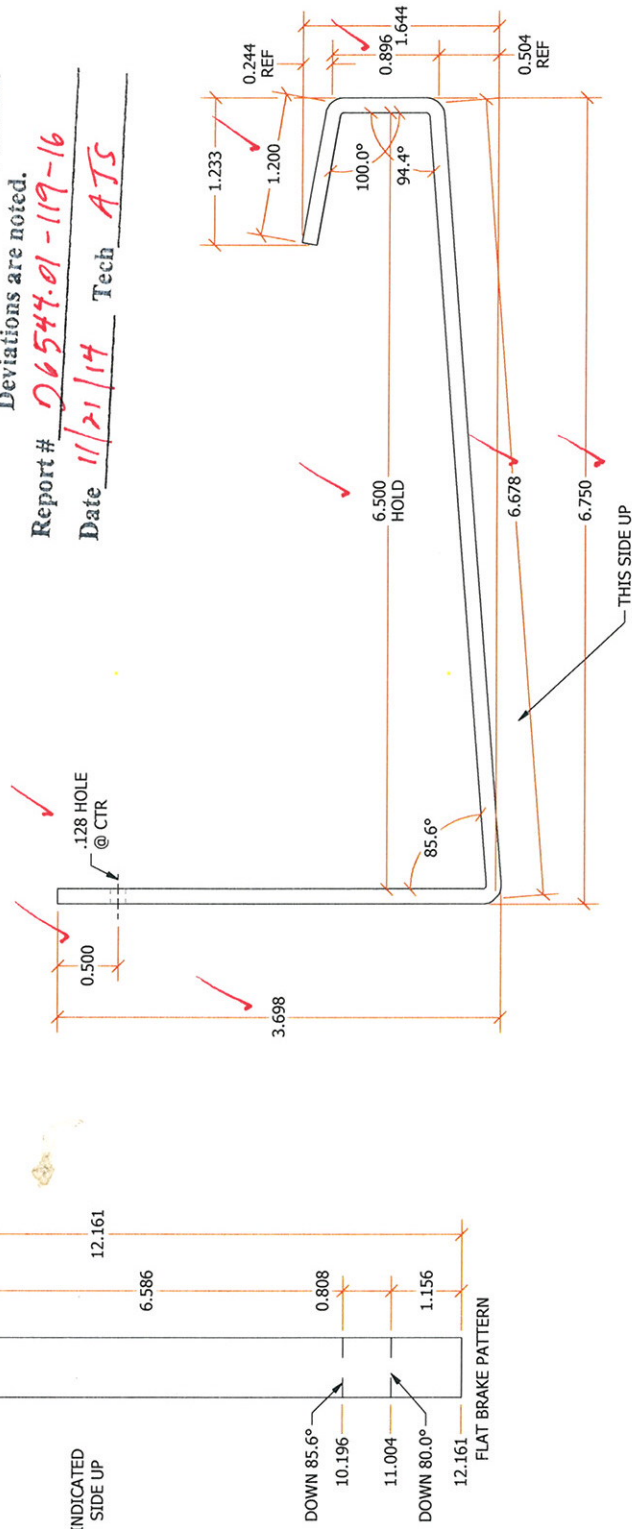



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06547.01-119-16

Date 11/21/14 Tech ATS



<div> SAF Perimeter Systems</div> <div>8370 Hwy 78 Villa Rica, GA 30180 Phone: 770-942-1207 Fax: 770-942-4173</div>		Materials		Value	
Material Schedule		Item	Material:	Aluminum	
			Thickness:	0.125	
Finish Schedule		Item	Finish	Value	
		Type:	Mill		
		Class:			
		Code & Color			
Customer Info		Item	Customer		
		Name:	Perimeter System		
		ID	per27330		
Job Information		Item	Project	Value	
		Name:	Perimeter System R&D		
		Job No.:	67413		
		Proj. ID:	2074		
Drawing Information		Item	Part & Drawing Info	Value	
		Line:	8		
		Sub Assy (Y/N)	N		
		Part Name:	Inside Strap 8"		
		Quantity:	80		
		Fab Type:	2		
		Shear Girth:	12.161		
		Shear Length:	1.000		
		Date:	4/10/2014	Drawn By:	wec
ALL ANGLES ARE 90° OTHERWISE NOTED RACK AT HOLES OR SLOTS OTHERWISE NOTED					

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS



Architectural Testing

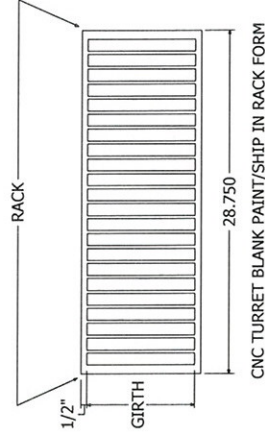
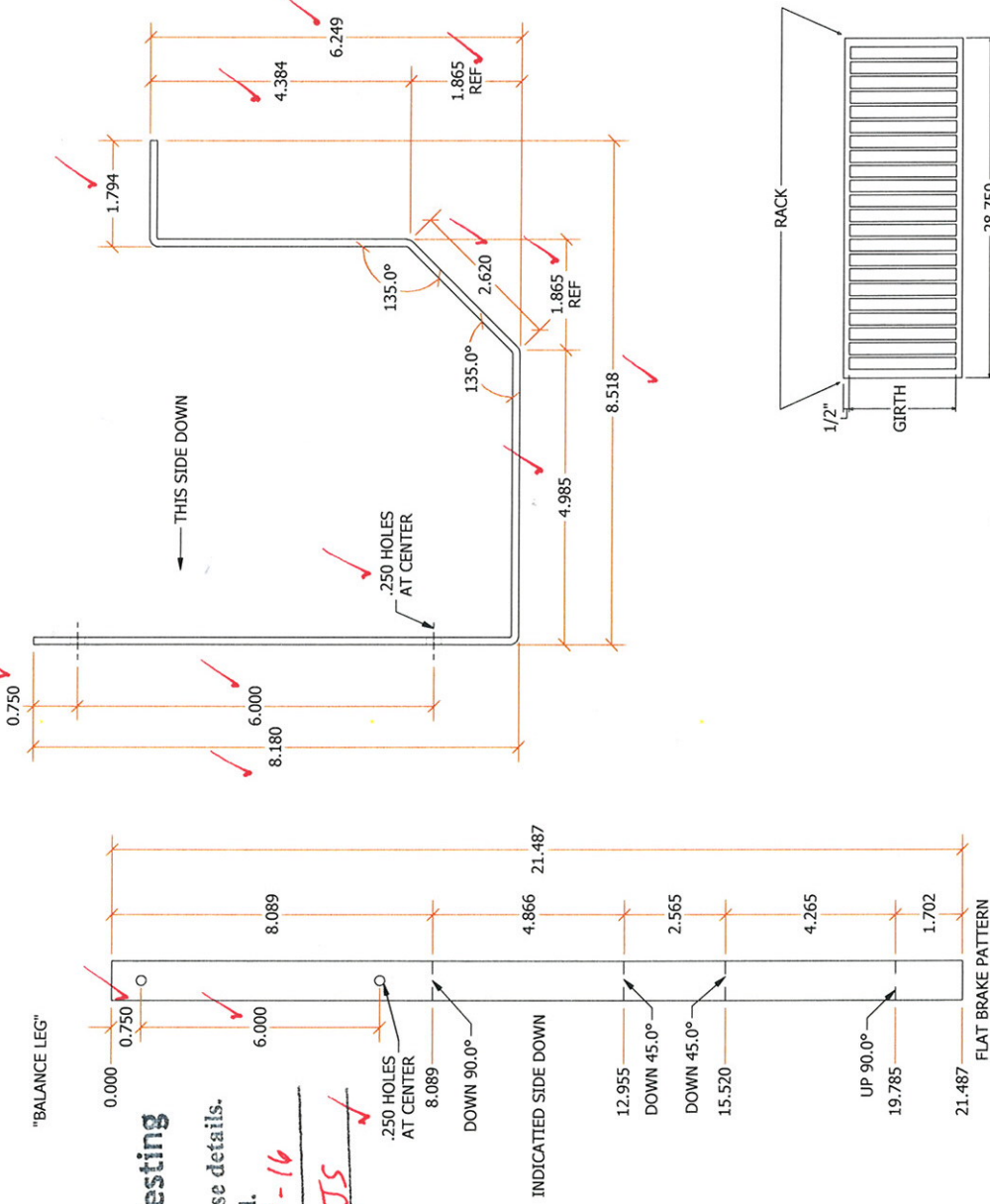
Test sample complies with these details.
Deviations are noted.

Report # 06544-01-119-16

Date 11/21/14 Tech AJS

ROUTE TO TURRET

ACTUAL SIZE = 21.487 x 1.000
TURRET BLANK SIZE = 22.487 x 28.750



SAF Perimeter Systems
133 Chatham Street
Sanford, NC 27330
Phone 919-775-7353
Fax 919-775-5652

Material Schedule	Materials	Item	Value
	Material:	Aluminum	0.125
	Thickness		
Finish Schedule	Item	Mill	Value
	Type:		
	Class:		
	Code & Color		
Customer Info	Item	Customer	Value
	Name:	Perimeter System	
	ID	per27330	
Job Information	Item	Project	Value
	Name:	Perimeter System R&D	
	Job No.:	67445	
	Proj. ID:	2074	
Drawing Information	Line:	Item	Value
	Sub Assy (Y/N)	4~2	Y
	Part Name:	8 In SB (SA)	
	Quantity:	100	
	Fab Type:	22	
	Shear Girth:	21.487	
	Shear Length:	1.000	
	Date:	5/19/2014	
	Drawn By:	cmf	

UNLESS OTHERWISE NOTED
ALL ANGLES ARE 90°
RACK AT HOLES ON SLOTS

Y:\Jobs\2074\Production Dwg\67445\67445.dwg

****NON STOCK PARTS***

USE TO TEST FIT ROM6SB (LINE 1)

SAE Perimeter Systems

139 Chatham Street
Sanford, NC 27330

Materials	Value
Item: Material: Thickness	Aluminum 0.040

Item	Finish	Value
Type:	Mill	
Class:		
Code & Color		

Customer	Item	Value
	Name:	Perimeter System
ID		per27330

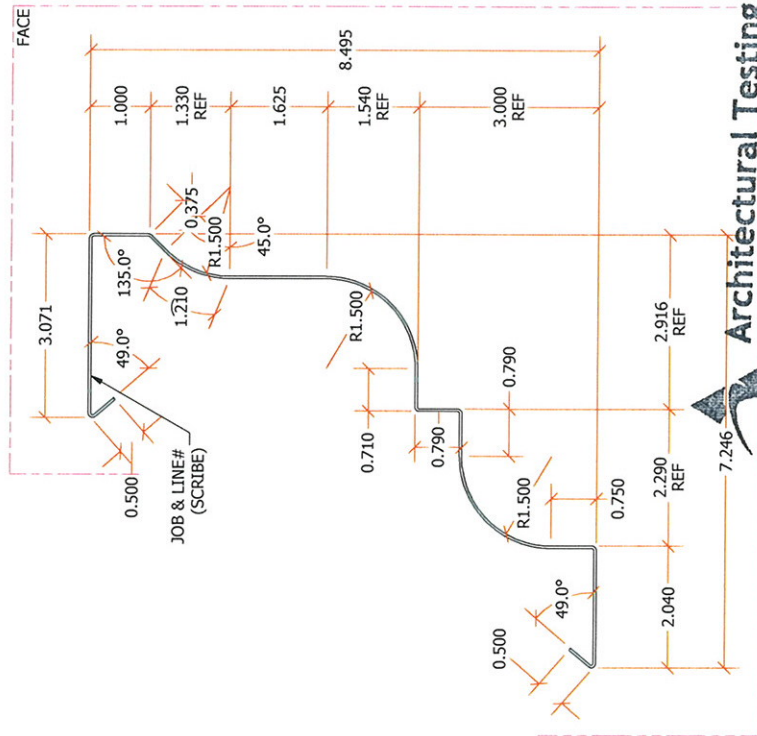
Item	Project	Value
Name:	Perimeter System R&D	
Job No.:	67445	
Proj. ID:	2074	

Part & Drawing Info	Value
Item	

Item	Value
Line:	1~2
Sub Assy (Y/N)	Y
Part Name:	Roman 6" _36"
Quantity:	1
Fab Type:	2
Shear Girth:	17.751
Shear Length:	36.000

Date: 5/10/2014

UNLESS OTHERWISE NOTED
ALL ANGLES ARE 90°
RACK AT HOLES OR SLOTS



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report # 06544.01-119-16

Date 11/21/14 Tech AJS

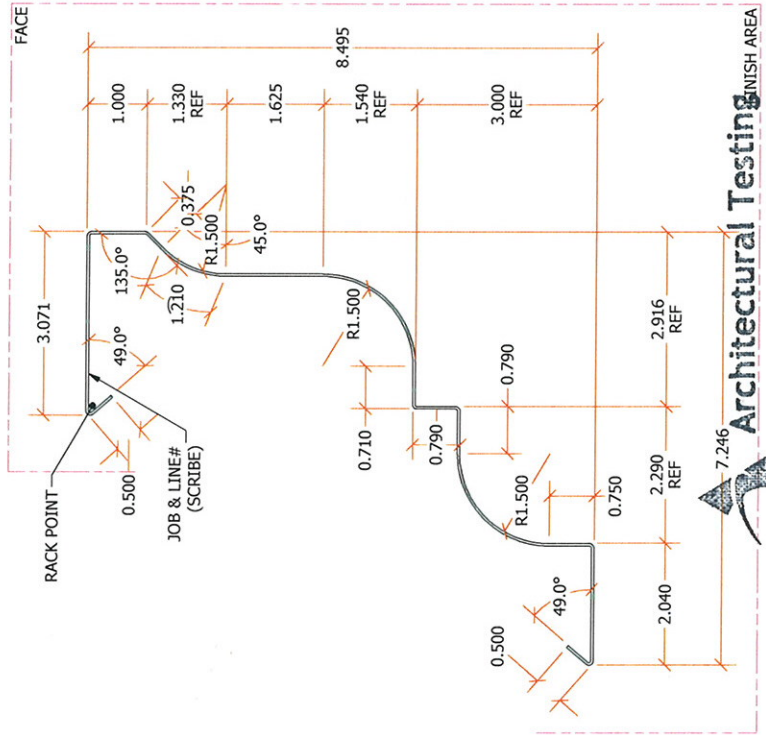
* Sample not retained; Divisions Not Verified

**FLAT PATTERN
TAPE UP**

Southern Aluminum Finishing Co., Atlanta, Nashville, Sanford, Winston, Redding

SAF does not warrant these details as suitable for a particular application. Design responsibility for the building remains with others who must review these details for compliance with the overall design.

NON STOCK PARTS



Test sample complies with these details.

Deviations are noted.

Report # 06544.01-119-16

Date 11/21/14 Tech *ATS*

** Sample not retained; Dimensions Not Verified*

SAF Perimeter Systems
6370 Hwy 78
Villa Rica, GA 30180
Phone: 770-942-1207
Fax: 770-942-4173

Materials	Item	Value
Material:	Aluminum	
Thickness:	0.040	

Material Schedule	Item	Finish	Value
	Type:	Mill	
	Class:		
	Code & Color		

Customer Info	Item	Value
Name:	Perimeter System	
ID	per27330	

Job Information	Item	Value
Name:	Perimeter System R&D	
Job No.:	67413	
Proj. ID:	2074	

Drawing Information	Item	Value
Line:	1	
Sub Assy (Y/N)	N	
Part Name:	Roman 6"	
Quantity:	10	
Fab Type:	2	
Shear Girth:	17.751	
Shear Length:	120.000	
Date:	4/10/2014	
Drawn By:	wec	

ALL ANGLES ARE 90° OTHERWISE NOTED RACK AT HOLES OR SLOTS OTHERWISE NOTED
--

\\RUSK\jobs\2074\production Dwg\67413\67413.dwg



D6544.01-119-16

APPENDIX B

Photographs



Photo No. 1
ANSI/SPRI Test G-1 Horizontal Load



Photo No. 2
ANSI/SPRI Test G-1 Horizontal Load



Photo No. 3
ANSI/SPRI Test G-2 Vertical Load



Photo No. 4
ANSI/SPRI Test G-2 Vertical Load



Photo No. 5
ANSI/SPRI Test G-3 Static Load



Photo No. 6
ANSI/SPRI Test G-3 Static Load