



U.S. Department
of Transportation
**Federal Highway
Administration**

December 15, 2006

400 Seventh St., S.W.
Washington, D.C. 20590

In Reply Refer To:
HSA-10/WZ-247
REVISED

Mr. John I. Lund
Chief Engineer
Cortina Safety Products Group
10706 W Grand Avenue
Franklin Park, IL 60131

Dear Mr. Lund:

Thank you for your letter of August 29, 2006, requesting the Federal Highway Administration (FHWA) acceptance of your company's A-Frame Type I and Type II barricades with vinyl I-Beam rails as crashworthy for use in work zones on the National Highway System (NHS).

Accompanying your letter were drawings depicting the specified products. You requested that we find these devices acceptable for use on the NHS under the provisions of the National Cooperative Highway Research Program Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features." In response to our request you sent additional information on November 13, 2006.

In support of your request, you referenced our October 2004 acceptance letter issued to a customer of Cortina's proprietary PlastX A-Frame barricade (acceptance letter WZ-180). The A-Frame barricade tested and accepted is identical to Cortina's. The barricade was tested and accepted with a light-weight warning light (3.3 lbs) securely attached with a bolt. Cortina's I-Beam vinyl rails may be considered equivalent to previously accepted thermoplastic I-Beam rails. Therefore, your company's parade style barricades using Cortina's vinyl I-Beam rails or other previously accepted rails up to 12 feet long with a top rail height measuring no taller than 44 inches, and with a light-weight warning light securely attached (not to exceed 3.3 lbs) are acceptable for use on the NHS, when proposed by a State.

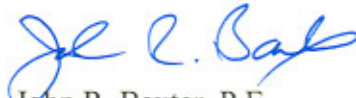
Please note the following standard provisions that apply to the FHWA letters of acceptance:

- Our acceptance is limited to the crashworthiness characteristics of the devices and does not cover their structural features, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any additional changes that may adversely influence the crashworthiness of the device will require a new acceptance letter.



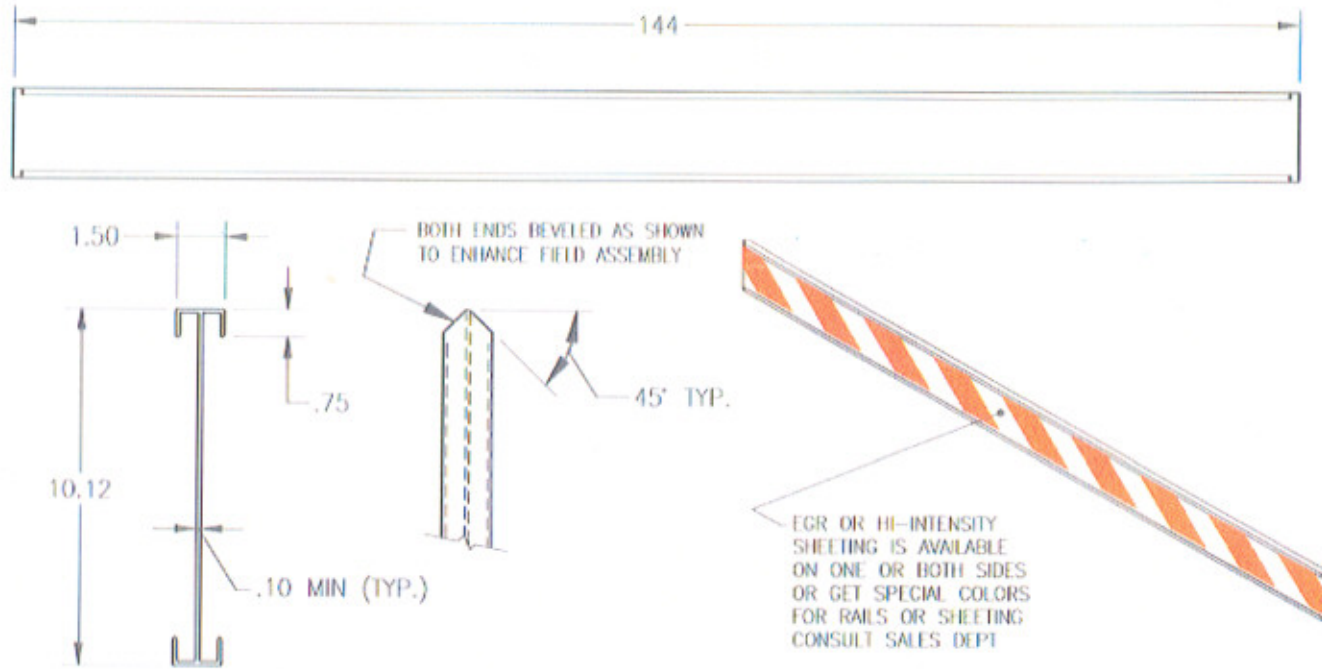
- Should the FHWA discover that the qualification testing was flawed, that in-service performance reveals unacceptable safety problems, or that the device being marketed is significantly different from the version that was crash tested, it reserves the right to modify or revoke its acceptance.
- You will be expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You will be expected to certify to potential users that the hardware furnished has essentially the same chemistry, mechanical properties, and geometry as that submitted for acceptance.
- To prevent misunderstanding by others, this letter of acceptance, designated as number WZ-247 shall not be reproduced except in full. This letter, and the test documentation upon which this letter is based, is public information. All such letters and documentation may be reviewed at our office upon request.
- Cortina's PlastX Parade style Type I and II Barricade Systems design is patented and considered proprietary. When proprietary devices are *specified by a highway agency* for use on Federal-aid projects they: (a) must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with existing highway facilities or that no equally suitable alternative exists or; (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411.
- This acceptance letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented device for which the applicant is not the patent holder. The acceptance letter is limited to the crashworthiness characteristics of the candidate device, and the FHWA is neither prepared nor required to become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.

Sincerely yours,



John R. Baxter, P.E.
Director, Office of Safety Design
Office of Safety

Enclosure



PART NUMBERS AVAILABLE

- 97-01-012 12' I-BEAM, PLAIN
- 97-01-012-01 12' I-BEAM, EGR SHEETING, 1 SIDE
- 97-01-012-02 12' I-BEAM, EGR SHEETING, 2 SIDES
- 97-01-012-03 12' I-BEAM, HI INTENSITY SHEETING, 1 SIDE
- 97-01-012-04 12' I-BEAM, HI INTENSITY SHEETING, 2 SIDES

SPECIFICATIONS

1. UV INHIBITOR IS TO BE ADDED TO RAW MATERIAL
2. FULL 90° RETURN LIP MANDATORY ON ALL FLANGES
3. WEIGHT OF EXTRUDED RAIL 11.4 LBS W/O SHEETING
4. RAILS TO PASS GO-NOGO GAGE AT CSPG QA DEPT

REV	REL	REVISION DESCRIPTION	BY	DATE
D	----	REVISED SPEC'S & BEVEL, REV HISTORY NOT SHOWN	JIL	10-27-2006
A	----	INITIAL RELEASE	JIL	11-17-2003

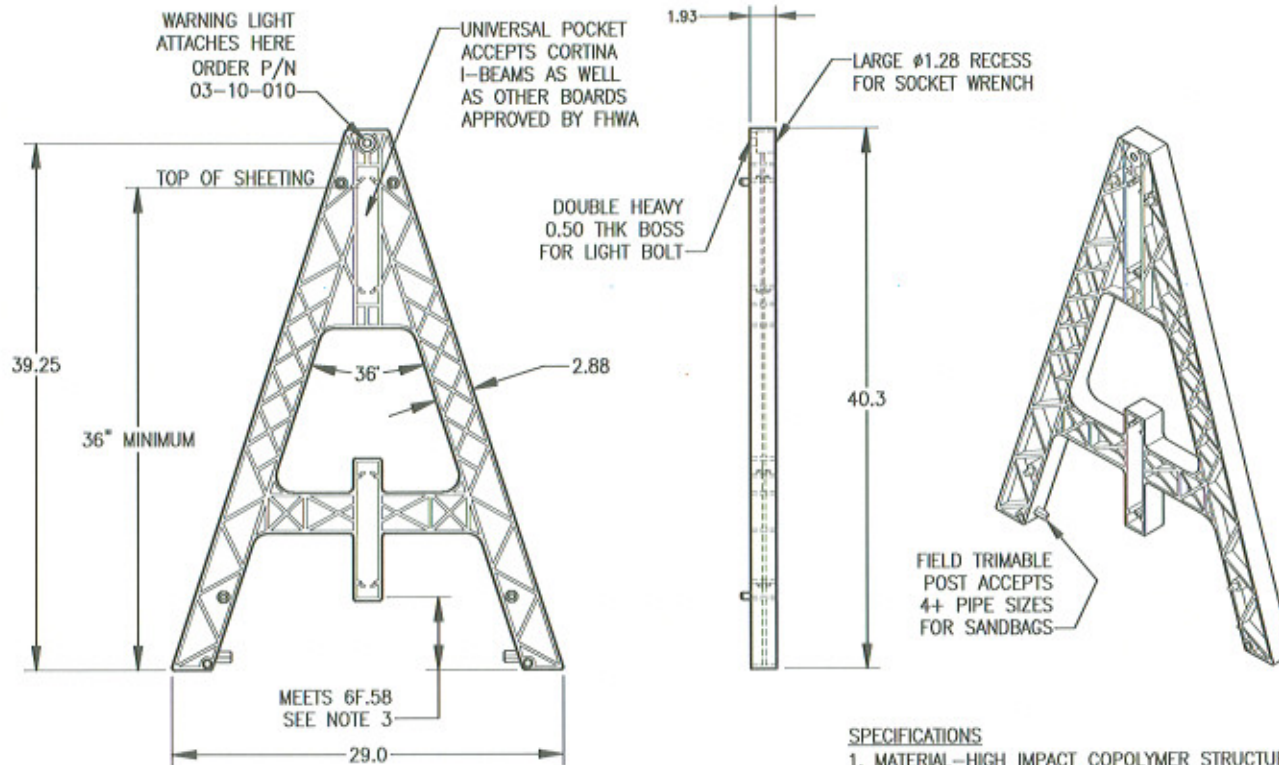
MATERIAL	COLOR AND FINISH	THIRD ANGLE PROJECTION
EXTERIOR GRADE PVC	WHITE	
TOLERANCES UNLESS OTHERWISE SPECIFIED:		
2 PL. DECIMALS	±	N/A
5 PL. DECIMALS	±	N/A
ANGLES	±	N/A

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Cortina
Safety Products Group
10706 WEST GRAND AVENUE, FRANKLIN PARK, IL 60131

12'-0" I-BEAM, PLAIN
FOR PARADE STYLE TYPE I & II BARRICADES
FOR FIELD ASSEMBLY WITH PLASTIX A-FRAME

SCALE AT A SIZE 1 = 20	DRAWING NUMBER	REVISION
DRAFTER JIL DATE 11-17-2003	97-01-012	D
CHECKER JS DATE 11-17-2003		



PART NUMBERS AVAILABLE

- 97-01-004 PLASTX A-FRAME WITH 2 RAIL OPENINGS, ADA COMPLIANT
- 97-01-004-3 PLASTX A-FRAME WITH 2 RAIL OPENINGS, HIGHER GROUND CLEARANCE
- 97-01-004-02 PLASTX A-FRAME WITH 1 RAIL OPENING

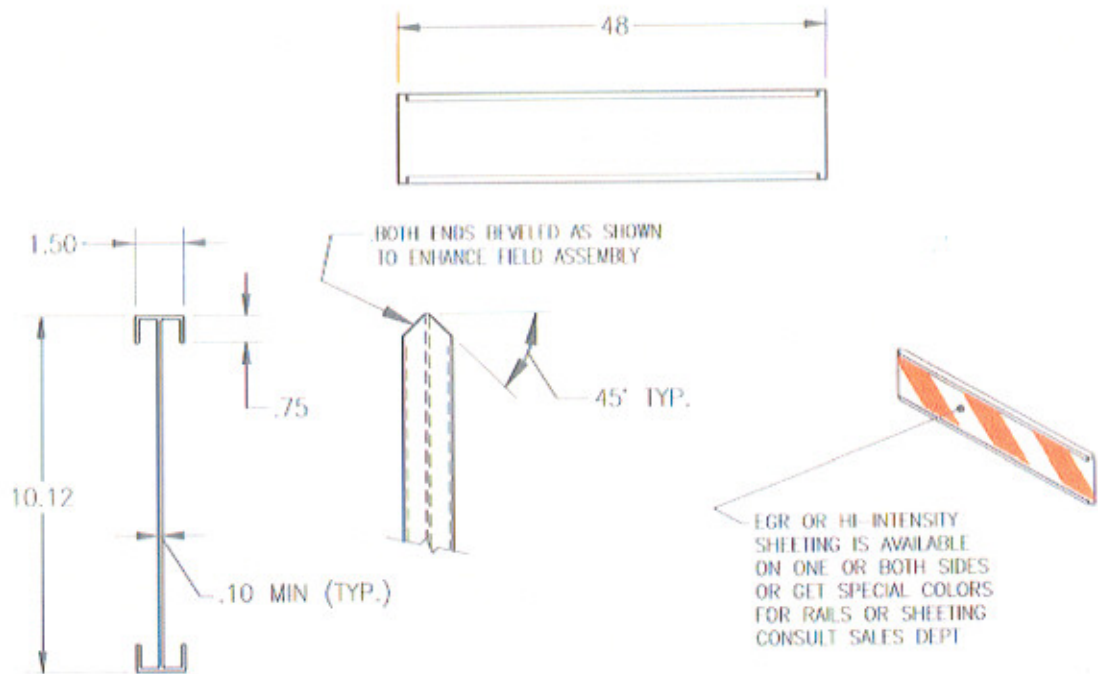
SPECIFICATIONS

1. MATERIAL-HIGH IMPACT COPOLYMER STRUCTURAL FOAM POLYOLEFIN
2. WEIGHT-7.5 LBS MINIMUM
3. HEIGHT OF LOWER I-BEAM RAIL WILL BE ADA COMPLIANT AS PER THE MUTCD SEC. 6F.58
4. MATES WITH CORTINA'S APPROVED I-BEAMS AND WITH OTHER REPORT 350 COMPLIANT MANUFACTURERS BOARDS

REV	REF	REVISION DESCRIPTION	BY	DATE
05	----	ADDED ALTERNATE P/N'S, REV'D NOTE 4, REV HISTORY OMITTED	JIL	11-17-2006
01	----	INITIAL RELEASE	JIL	4-24-2003

MATERIAL STRUCTURAL FOAM POLYOLEFIN MIN WEIGHT = 7.5 LB	COLOR AND FINISH WHITE (STANDARD) MANY COLORS ARE AVAILABLE	THIRD ANGLE PROJECTION
TOLERANCES UNLESS OTHERWISE SPECIFIED		
2 PL. DECIMALS ± N/A		
3 PL. DECIMALS ± N/A		
ANGLES ± N/A		
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ADA COMPLIANT A-FRAME LEG			
FORMS TYPE II / III BARRICADES, USED WITH I-BEAM RAILS OR WITH EXTRUDED BOARDS			
SCALE AT A SIZE 1 = 12		DRAWING NUMBER	REVISION
DRAFTER JIL	DATE 4-24-2003	97-01-004	05
CHECKER SPG	DATE 4-24-2003		



EGR OR HI-INTENSITY SHEETING IS AVAILABLE ON ONE OR BOTH SIDES OR GET SPECIAL COLORS FOR RAILS OR SHEETING CONSULT SALES DEPT

PART NUMBERS AVAILABLE

- 97-01-013 4' I-BEAM, PLAIN
- 97-01-013-02 4' I-BEAM, EGR SHEETING, 2 SIDES

SPECIFICATIONS

1. UV INHIBITOR IS TO BE ADDED TO RAW MATERIAL
2. FULL 90° RETURN LIP MANDATORY ON ALL FLANGES
3. WEIGHT OF EXTRUDED RAIL 3.8 LBS W/O SHEETING
4. RAILS TO PASS GO-NOGO GAGE AT CSPG QA DEPT

REV	RET	REVISION DESCRIPTION	BY	DATE
D	----	REVISED SPEC'S & BEVEL, REV HISTORY NOT SHOWN	JIL	10-27-2006
A	----	INITIAL RELEASE	JIL	11-17-2003

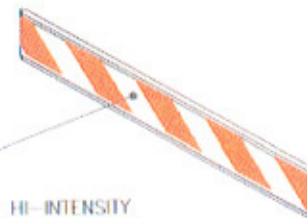
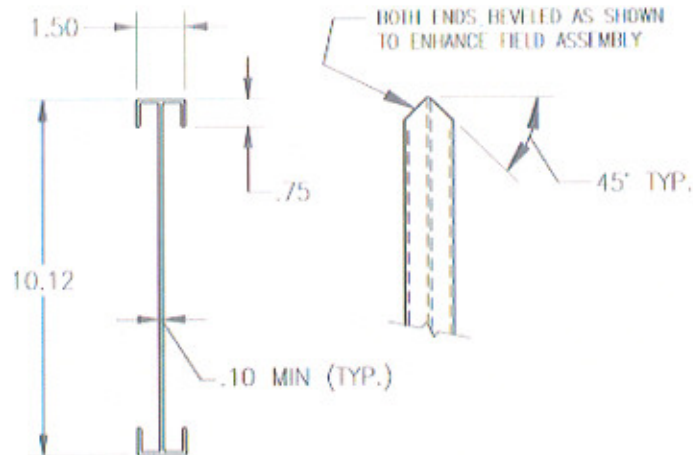
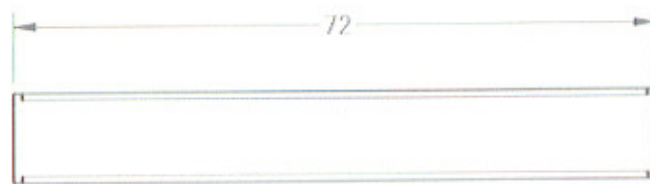
MATERIAL	COLOR AND FINISH	THIRD ANGLE PROJECTION
EXTERIOR GRADE PVC	WHITE	
TOLERANCES UNLESS OTHERWISE SPECIFIED		
2 PL DECIMALS	3	N/A
3 PL DECIMALS	4	N/A
ANGLES	1	N/A

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Cortina Company
Safety Products Group
10706 WEST GRAND AVENUE, FRANKLIN PARK, IL 60131

4'-0" I-BEAM, PLAIN
FOR PARADE STYLE TYPE I & II BARRICADES
FOR FIELD ASSEMBLY WITH PLASTX A-FRAME

SCALE AT A SIZE 1 = 20	DRAWING NUMBER	REVISION
DRAWER JIL DATE 11-17-2003	97-01-013	D
CHECKER JS DATE 11-17-2003		



EGR OR HI-INTENSITY SHEETING IS AVAILABLE ON ONE OR BOTH SIDES OR GET SPECIAL COLORS FOR RAILS OR SHEETING CONSULT SALES DEPT

PART NUMBERS AVAILABLE

- 97-01-008 6' I-BEAM, PLAIN
- 97-01-008-01 6' I-BEAM, EGR SHEETING, 1 SIDE
- 97-01-008-02 6' I-BEAM, EGR SHEETING, 2 SIDES
- 97-01-008-03 6' I-BEAM, HI INTENSITY SHEETING, 1 SIDE
- 97-01-008-04 6' I-BEAM, HI INTENSITY SHEETING, 2 SIDES
- 97-01-008-06 6' I-BEAM, LIME SHEETING, 1 SIDE
- 97-01-008-07 6' I-BEAM, LIME SHEETING, 2 SIDES

SPECIFICATIONS

1. UV INHIBITOR IS TO BE ADDED TO RAW MATERIAL
2. FULL 90° RETURN LIP MANDATORY ON ALL FLANGES
3. WEIGHT OF EXTRUDED RAIL 5.7 LBS W/O SHEETING
4. RAILS TO PASS GO-NOGO GAGE AT CSPG QA DEPT

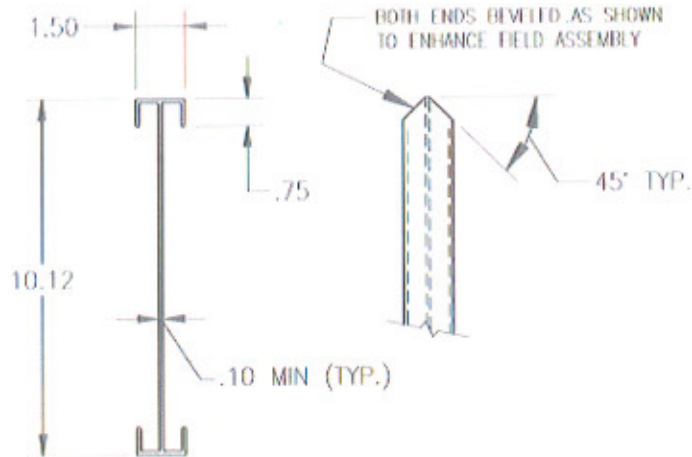
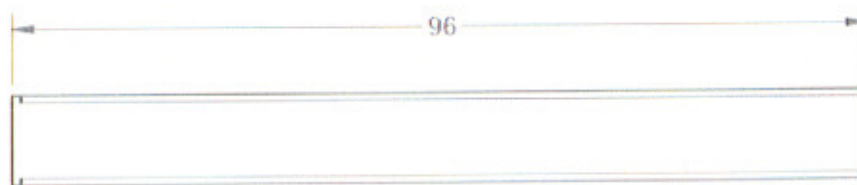
D	----	REVISED SPEC'S & BEVEL, REV HISTORY NOT SHOWN	JIL	10-27-2006
A	----	INITIAL RELEASE	JIL	11-17-2003
REV	RET	REVISION DESCRIPTION	BY	DATE

6'-0" I-BEAM, PLAIN
 FOR PARADE STYLE TYPE I & II BARRICADES
 FOR FIELD ASSEMBLY WITH PLASTIX A-FRAME

MATERIAL	COLOR AND FINISH	THIRD ANGLE PROJECTION
EXTERIOR GRADE PVC	WHITE	
TOLERANCES UNLESS OTHERWISE SPECIFIED		
2 PL. DECIMALS ± N/A		
3 PL. DECIMALS ± N/A		
ANGLES ± N/A		

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SCALE AT A SIZE 1 = 20	DRAWING NUMBER	REVISION
DRAFTER JIL DATE 11-17-2003	97-01-008	D
CHECKER JS DATE 11-17-2003		



EGR OR HI-INTENSITY SHEETING IS AVAILABLE ON ONE OR BOTH SIDES OR GET SPECIAL COLORS FOR RAILS OR SHEETING CONSULT SALES DEPT

PART NUMBERS AVAILABLE

- 97-01-009 8' I-BEAM, PLAIN
- 97-01-009-01 8' I-BEAM, EGR SHEETING, 1 SIDE
- 97-01-009-02 8' I-BEAM, EGR SHEETING, 2 SIDES
- 97-01-009-03 8' I-BEAM, HI INTENSITY SHEETING, 1 SIDE
- 97-01-009-04 8' I-BEAM, HI INTENSITY SHEETING, 2 SIDES
- 97-01-009-06 8' I-BEAM, LIME SHEETING, 1 SIDE
- 97-01-009-07 8' I-BEAM, LIME SHEETING, 2 SIDES

SPECIFICATIONS

1. UV INHIBITOR IS TO BE ADDED TO RAW MATERIAL
2. FULL 90° RETURN LIP MANDATORY ON ALL FLANGES
3. WEIGHT OF EXTRUDED RAIL 7.6 LBS W/O SHEETING
4. RAILS TO PASS GO-NOGO GAGE AT CSPG QA DEPT

REV	RET	REVISION DESCRIPTION	BY	DATE
D	----	REVISED SPEC'S & BEVEL, REV HISTORY NOT SHOWN	JIL	10-27-2006
A	----	INITIAL RELEASE	JIL	11-17-2003

MATERIAL	COLOR AND FINISH	THIRD ANGLE PROJECTION
EXTERIOR GRADE PVC	WHITE	
TOLERANCES UNLESS OTHERWISE SPECIFIED		
2 PL DECIMALS ± N/A		
.3 PL DECIMALS ± N/A		
ANGLES ± N/A		

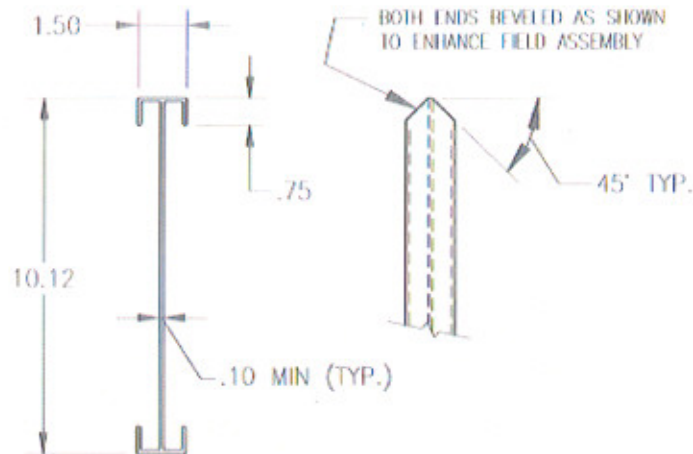
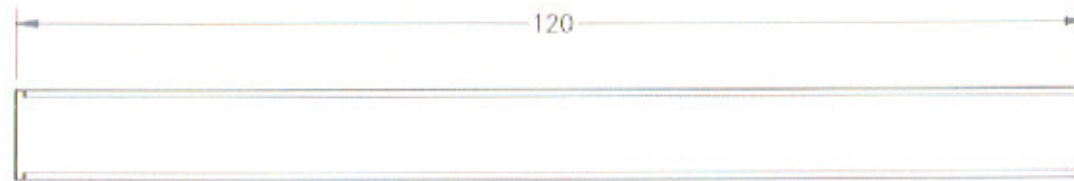
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Cortina Company
Safety Products Group

10706 WEST GRAND AVENUE, FRANKLIN PARK, IL 60131

8'-0" I-BEAM, PLAIN
FOR PARADE STYLE TYPE I & II BARRICADES
FOR FIELD ASSEMBLY WITH PLASTX A-FRAME

SCALE AT A SIZE 1 = 20	DRAWING NUMBER	REVISION
DRAFTER JIL DATE 11-17-2003	97-01-009	D
CHECKER JS DATE 11-17-2003		



EGR OR HI-INTENSITY SHEETING IS AVAILABLE ON ONE OR BOTH SIDES OR GET SPECIAL COLORS FOR RAILS OR SHEETING CONSULT SALES DEPT

PART NUMBERS AVAILABLE

- 97-01-010 10' I-BEAM, PLAIN
- 97-01-010-01 10' I-BEAM, EGR SHEETING, 1 SIDE
- 97-01-010-02 10' I-BEAM, EGR SHEETING, 2 SIDES
- 97-01-010-03 10' I-BEAM, HI INTENSITY SHEETING, 1 SIDE
- 97-01-010-04 10' I-BEAM, HI INTENSITY SHEETING, 2 SIDES

SPECIFICATIONS

1. UV INHIBITOR IS TO BE ADDED TO RAW MATERIAL
2. FULL 90° RETURN LIP MANDATORY ON ALL FLANGES
3. WEIGHT OF EXTRUDED RAIL 9.5 LBS W/O SHEETING
4. RAILS TO PASS GO-NOGO GAGE AT CSPG QA DEPT

D	----	REVISED SPEC'S & BEVEL, REV HISTORY NOT SHOWN	JIL	10-27-2006
A	----	INITIAL RELEASE	JIL	11-17-2003
REV	REF	REVISION DESCRIPTION	BY	DATE

MATERIAL		COLOR AND FINISH	THIRD ANGLE PROJECTION
EXTERIOR GRADE PVC		WHITE	
TOLERANCES UNLESS OTHERWISE SPECIFIED			
2 PL. DECIMALS		3	N/A
3 PL. DECIMALS		4	N/A
ANGLES		3	N/A

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Cortina ^{A Cortina Company}
Safety Products Group
 10706 WEST GRAND AVENUE, FRANKLIN PARK, IL 60131
 TEL: 847-940-1100
 WWW.CORTINAGROUP.COM

10'-0" I-BEAM, PLAIN
FOR PARADE STYLE TYPE I & II BARRICADES
FOR FIELD ASSEMBLY WITH PLASTX A-FRAME

SCALE AT A SIZE 1 = 20	DRAWING NUMBER	REVISION
DRAWER JIL DATE 11-17-2003	97-01-010	D
CHECKER JS DATE 11-17-2003		