

AUTHORIZATION TO MARK

This authorizes the application of the Certification Mark(s) shown below to the models described in the Product(s) Covered section when made in accordance with the conditions set forth in the Certification Agreement and Listing Report(s). This authorization also applies to the Multiple Listee model(s) identified on the correlation page of the Listing Report.

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Applicant: Ceco Door Products (Milan)

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Evaluation Center: Intertek (Middleton)

Control/Client Number: 242757

Authorized By: Dean Davidson, Director of Certification

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This document supersedes all previous Authorizations to Mark for the noted Report Number.

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Testing Standard(s):	ASTM E330 (2002), ASTM E331 (2000), ASTM E1886 (2002), ASTM
	E1996 (2003), ANSI A250.13 (2003), TAS 203, TAS 201, TAS 202,
	ASTM E1886 (2005), ASTM E1996 (2008), ASTM E331 (2009),
Product:	Ceco Volume IVA - Windstorm Frame Specs

ATM for Report: 3118505, 3126983, 3159480, 3159865, 3163505, 3190362MID-002, Letter Report 100407338, 100407338MID-003, Letter Report 100545411, 100545411MID-003, Letter Report 100859994, 100859994MID-003, 101343015MID-001, 101274930MID-003, 101274930MID-004, 102050876MID-001

ATM Issue Date: <u>07/25/2017</u>

PRODUCT DESCRIPTION

Product Covered: Wind resistant building components tested to one or more of the following windstorm or severe weather performance standards:

- 1. Windstorm Resistant Frames as tested in accordance with ANSI A250.13
- 2. ASTM E330/E1886/E1996
- 3. TAS201, TAS202, TAS203

Frames may also be listed as fire door frames tested in accordance with UL10B or UL10C. Frames may be fire rated up to and including three hours. The construction details and hardware preparations for these frames shall comply with Procedure Sections "A thru H".

Frame Sizes: Listed sizes are defined in the illustrations that follow.

<u>Construction</u>: Each wind resistant building component shall be constructed as detailed in the illustrations that follow. For design features not covered in this section, see Sections "A thru H".

<u>Metal Gauges:</u> The frame metal gauges shall have the minimum thickness as shown in the Illustrations to follow.

Painting: See "Section General" for specifics on painting.

<u>Marking:</u> Each wind-resistant building component shall be marked in accordance with the details on Illustration 7. Fire rated components will be marked in accordance with the individual product sections of this procedure.

Installation Instructions: See ANSI A250.11 for installation instructions.

<u>Hardware</u>: For listed hardware, see Building Materials Directory Guide.

Water Infiltration: Single outswing and standard outswing pairs of 3 piece, sidelite, transom, or transom/sidelite frames in masonry, block, welded to building structure, or drywall. Tested to ASTM E331 in accordance with Florida TAS 202, single swing doors achieved ±50 psf design pressure and pairs achieved ±60 psf design pressure. Maximum door opening size 4'0" x 8'0" single and 8'0 x 8'0 pair. Rim exit required for pairs with hardware mullion. Any approved locking/exit hardware (for single doors) may be used in a pair with hollow metal mullion (10 gauge "I" beam reinforcement required in hollow metal mullion). See Illustrations # 6B and 6C for Weather Strip installation instructions for location and installation of seals, rain drip, and threshold. For transoms and sidelites, glass should be set from the interior. Glass and glazing stops should be set into a bedding of Dow 995 silicone. Panels should be set from the exterior and welded to the frame with welds located 3" from each end and 12" on center, and the top and bottom 3" from each end and at the midspan with 1/4" x 1/2" long welds. The perimeters of panels should be sealed on the interior and exterior with silicone.

INDEX OF ILLUSTRATIONS

WINDSTORM RESISTANT FRAMES

DESCRIPTION	ILLUSTRATION NO.
Door Frame Elevation	1
Door Frame Elevation – Ready Set Frames	1A
Three Piece Frame	1B
Sidelite Frame Elevations	2
Window Frame Elevations	3
"I" Beam Construction Details	3A
Alternate Frame Elevations	4
KD Corner Frame Assembly	5
Strike Reinforcement for Rim Exit Openings Larger Than 3'0"	5A
Surface Vertical Rod Reinforcement for ±70 psf Pairs with Glass	5B
Stud Wall Frame Anchors	6
Masonry Wall Frame Anchor	6A
Water Infiltration Preparations – Single Swing	6B
Water Infiltration Preparations – Standard Swing Pair	6C

MARKING

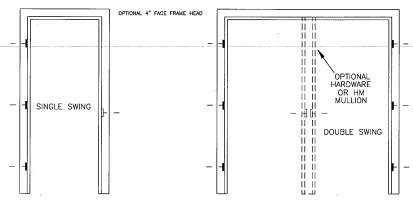
DESCRIPTION	ILLUSTRATION NO.	
Label Detail		7

DRAWN BY: JRB

ALL LOCATIONS

PROJECT REF: TS13CL05





3070 \pm 100 PSF MAX. DESIGN LOAD 4080 \pm 70 PSF MAX. DESIGN LOAD 4" MIN./14" MAX. DEPTH 16 GA. MIN. KD OR WELDED (12 GA. WELDED) IMPACT RATING = 350 FT-LBF

8080 MAX. 4" MIN./14" MAX. DEPTH 16 GA. MIN. KD OR WELDED (12 GA. WELDED) DESIGN LOAD = +/-70 PSF IMPACT RATING = 350 FT-LBF

ANCHORS & METHOD	OF ATTACHMENT
ANCHOR TYPE	*LOCATION
EO – PIPE & SLEEVE (BUTTERFLY UP TO 3070 MAX.) WOOD BUCK 3/8" X 6" LAG SCREW	12" MAX. FROM EACH END & 19" O.C.
EO - PIPE & SLEEVE (BUTTERFLY UP TO 3070 MAX.) MASONRY BUCK 3/8" X 6" EXPANSION SHELL	12" MAX. FROM EACH END & 19" O.C.
MASONRY "T" — GROUTED (Head: 3/8" x 6" Expansion Shell)	16" - 24" O.C. © GROUT JOINTS
WIRE MASONRY — GROUTED (Head: 3/8" x 6" Exponsion Shell)	16" - 24" O.C. © GROUT JOINTS
WOOD STUD METAL STUD (NO FLOOR ANCHORS)	6", 6" & EQUAL — 21" MAX. FOR INTERMEDIATE SPACES
Poured In Place Wall	NA

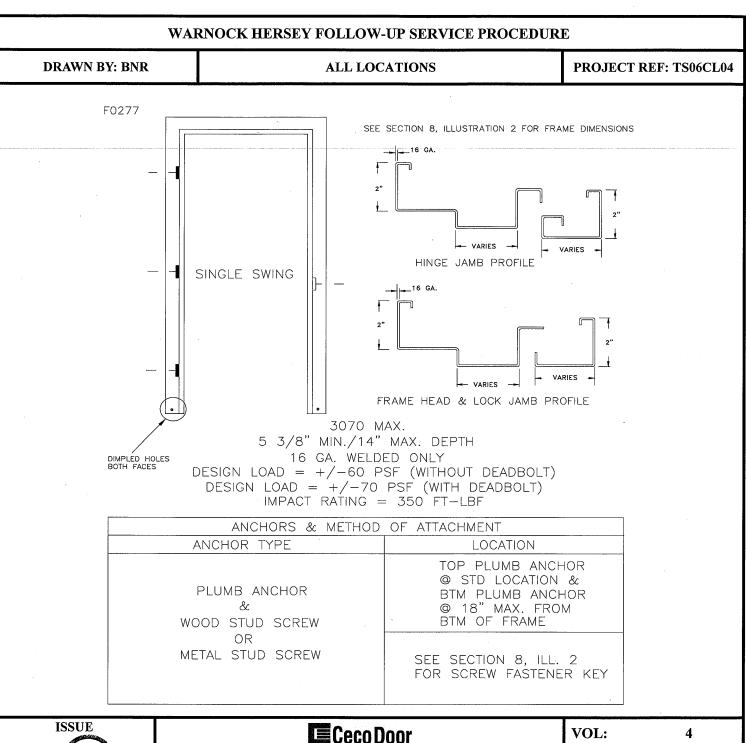
Jamb:12"Max. From Each End & 19" O.C. Head: (4) Total Req'd, 9" Max. From Centerline of Head, 9" Max. from Each Hinge Jamb
© Jamb:12"Max. From Each End & 19" O.C. © Head: (4) Total Req'd, 9" Max. From Centerline of Head, 9" Max. from Each Hinge Jamb
 Jamb:16"-24" O.C. Grout Joints Head: (4) Total Req'd, 9" Max. from Centerline of Head, 9" Max. From Each Hinge Jamb.
 Jamb:16"-24" O.C.@ Grout Joints Head: (4) Total Req'd, 9" Max. from Centerline of Head, 9" Max. From Each Hinge Jamb.
© Jamb:6", 6" & Equal—21" Max for Intermediate Spaces. © Head: (4) Total Req'd, 6" Max. From Centerline of Head, 6" Max from Each Hinge Jamb
NA

Trio & Trio—E Opening **Sizes Over 6070 Pairs LOCATION

*FOR DOUBLE SWING FRAMES WITH 4" FACE FRAME HEADS, (2) EO ANCHORS REQUIRED WHEN INSTALLED IN MASONRY WALL OR (2) STUD ANCHORS REQUIRED WHEN INSTALLED IN STUD WALL. LOCATION OF ANCHORS TO BE 16" FROM CENTERLINE OF FRAME HEAD, OR CAN BE GROUTED FULL WITH 2000 PSI MIN. CONCRETE.

**FOR SIZES 6070 OR LESS REFER TO TABLE ABOVE.



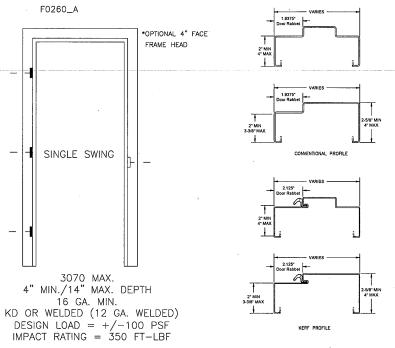


ISSUE	Ceco Door	VOL:	4
	ASSA ABLOY	SEC:	11
Intertek 2/12/14	Windstorm Resistant ReadySet Door Frame Elevations	ILL:	1A

DRAWN BY: JRB

ALL LOCATIONS

PROJECT REF: TS13CL05



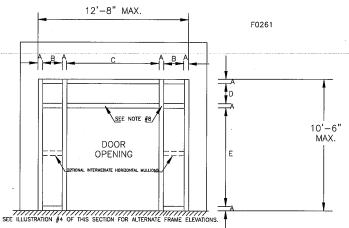
*ANCHORS & METHOD OF ATTACHMENT				
ANCHOR TYPE	*LOCATION			
EO — PIPE & SLEEVE (BUTTERFLY UP TO 3070 MAX.) WOOD BUCK 3/8" X 6" LAG SCREW	12" MAX. FROM EACH END & 19" O.C.			
EO PIPE & SLEEVE (BUTTERFLY UP TO 3070 MAX.) MASONRY BUCK 3/8" X 6" EXPANSION SHELL	12" MAX. FROM EACH END & 19" O.C.			
MASONRY "T" - GROUTED	16" — 24" O.C. © GROUT JOINTS			
WIRE MASONRY — GROUTED	16" − 24" O.C. ⊚ GROUT JOINTS			
WOOD STUD METAL STUD (NO FLOOR ANCHORS)	6", 6" & EQUAL — 21" MAX. FOR INTERMEDIATE SPACES			
Poured In Place Wall	NA			

ISSUE	Ceco Door	VOL:	4
	ASSA ABLOY	SEC:	11
Intertek Alialia	Windstorm Resistant Three Piece Frame	ILL:	1B

DRAWN BY: JRB

ALL LOCATIONS

PROJECT REF: TS13CL05



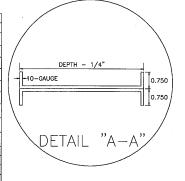
- 1. DESIGN PRESSURE = +/- 60 PSF IMPACT RATING = 350 FT-LBF
- ALL FRAME PERIMETERS & HEADS OF FASTENERS SEALED WITH SILICONE.
- 3. CORNER CONSTRUCTION = WELDED ONLY
- 4. ANCHORS = SEE CHART BELOW
- 5. FRAME DEPTH = 4" MIN. / 14" MAX.
- 16 GA. MIN.
 6. DOOR OPENING = 3'-0" X 8'-0" SINGLE MAX.
 6'-0" X 8'-0" PAIRS MAX.
- 7. STOP HEIGHT = 5/8" MIN.
- 8. FULL HEIGHT VERTICAL & 6' HORIZONTAL MULLIONS MUST BE REINFORCED WITH
 (2) 10—GAUGE X 3/4" X FRAME DEPTH
 "C" CHANNELS INSTALLED BACK TO
 BACK TO FORM SIMULATED "I" BEAM.
 SFE DETAIL "A—A"

GLAZING MATERIAL	DIM. "B" MAX.	DIM. "C" MAX.	DIM. "D" MAX.	DIM. "E" MAX.	FRAME DIM. MIN.	"A" MAX.
*GLASSLAM SAFETY PLUS 2 LAMINATED GLASS	36"	72"	36"	94"	2"	4"

"BEDDING IS CLOSED CELL FOAM TAPE 1/B" X 1/2" AND DOW CORNING 995 STRUCTURAL SILCONE. 1 3/4" STEEL STIFFEND, HONEYCOMB, POLYURETHANE, MINERAL CORE OR PONLYSTYRENC CORE PANELS (18 Go Min – 14 Go May) MAY BE USED IN LIEU OF GLASSILAM. PANELS ARE WELDED TO FRAME WITH WELDS LOCATED ON THE SIDES 3" MAX. FROM EACH RUD & 3" MAX, O.C. & ON THE TOP & BOTTOM 3" MAX. FROM EACH RUD & 4" ANX. O.C. & ON THE TOP & BOTTOM 3" MAX. FROM EACH END & AT 12" MAX. O.C. THE WELDS ARE MIN. 1/4" WELDS X 1/2" LONG, PANELS TO BE INSTALLED IN EXTERIOR (OUTSIDE) RABBET. WELDS ARE LOCATED WHERE PANEL ABUTS FRAME SOFFIT. PANELS ARE SEALED WITH SILCONE.

SEE_DETAIL "A-A".					
ANCHORS & METHOD OF ATTACHMENT					
ANCHOR TYPE		LOCATION			
EO - PIPE & SLEEVE	@ JAMB	12" MAX. FROM SILL, 8" FROM HEAD & 20" O.C.			
OR BUTTERFLY WOOD BUCK	@ HEAD	**2" FROM EACH VERTICAL MEMBER & 14" O.C.			
3/8" X 6" LAG SCREW	@ SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			
EO - PIPE & SLEEVE OR BUTTERFLY		12" MAX. FROM SILL, 8" FROM HEAD & 20" O.C.			
MASONRY BUCK	@ HEAD	**2" FROM EACH VERTICAL MEMBER & 14" O.C.			
3/8" X 6" EXPANSION SHELLS	© SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			
WIRE MASONRY OR MASONRY "T" — GROUTED.	@ JAMB	8" MAX. FROM EACH END & 16" O.C.			
WELDED TO STEEL HEADER,	@ HEAD	***WELDED TO STEEL CHANNEL HEADER			
EO P&S OR BUTTERFLY - 3/8" X 6" BOLTS	@ SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			
	@ JAMB	***5" MAX. FROM SILL & 27.5" MAX. O.C.			
WELDED TO STEEL BUCK	@ HEAD	***WELDED TO STEEL CHANNEL HEADER			
	@ SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			
WOOD STUD METAL STUD	@ JAMB	5" MAX. FROM SILL & 27.5" MAX. O.C.			
	@ HEAD	**2" MAX. FROM EACH VERTICAL MEMBER & 14" O.C.			
(NO FLOOR ANCHORS)	@ SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			

**FOR 6° & UP HEAD MEMBERS. FOR HEADS LESS THAN 6° , LOCATE ANCHORS 2" MAX. FROM EACH VERTICAL MEMBER & Φ MIDPOINT OF SPAN.





□ Ceco Door ASSA ABLOY

Windstorm Resistant

Sidelite, Transom or Transom/Sidelite Frame Elevations

VOL:

4

SEC:

11

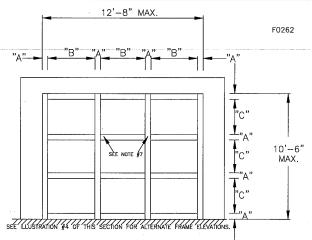
ILL:

2

DRAWN BY: JRB

ALL LOCATIONS

PROJECT REF: TS13CL05



- 1. DESIGN PRESSURE = +/- 60 PSF IMPACT RATING = 350 FT-LBF
- 2. ALL FRAME PERIMETERS & HEADS OF FASTENERS SEALED WITH SILICONE.
- 3. CORNER CONSTRUCTION = WELDED ONLY
- 4. ANCHORS = SEE CHART BELOW
- 5. FRAME DEPTH = 4" MIN. / 14" MAX.
 16 GA. MIN.
- 6. STOP HEIGHT = 5/8" MIN.
- 7. FULL HEIGHT VERTICAL & 6' HORIZONTAL MULLIONS MUST BE REINFORCED WITH (2) 10-GAUGE X 3/4" X FRAME DEPTH "C" CHANNELS INSTALLED BACK TO BACK TO FORM SIMULATED "I" BEAM. SEE DETAIL "A-A".

GLAZING MATERIAL	FRAME DIM. MIN.	FACES "A" MAX.	DIM. "B" MAX.	DIM. "C" MAX.	MAX. EXPOSED GLAZED AREA (in.²)
*GLASSLAM SAFETY PLUS 2 LAMINATED GLASS	2"	4"	72"	94"	3384

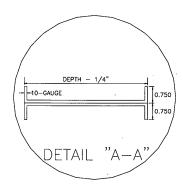
*BEDDING IS CLOSED CELL FOAM TAPE 1/8" X 1/2" AND DOW CORNING 995 STRUCTURAL SILICONE. 1 3/4" STEEL STIFFENED, HONEYCOMB, POLYVBETHANE, MINERAL CORE OR POLYSTYRENE CORE PANELS (18 G Min – 14 GG Mox) MAY BE USED IN LIEU OF CLASSLAM. PANELS ARE WELDED TO FRAME WITH WELDS LOCATED ON THE SIDES 3" MAX. FROM EACH END & 3" MAX. O.C. & ON THE TOP & BOTTOM 3" MAX. FROM EACH END & AT 12" MAX. O.C. THE WELDS ARE MIN. 1/4" WELDS X 1/2" LONG. PANELS ARE SEALED WITH SILICONE.

ANCHORS & METHOD OF ATTACHMENT ANCHOR TYPE CO — PIPE & SLEEVE OR BUTTERFLY WOOD BUCK 3/8" X 6" LAG SCREW OR SUTTERFLY MASONRY BUCK 3/8" X 6" EXPANSION SHELLS WIRE MASONRY OR MASONRY "T" — GROUTED, WELDED TO STEEL HEADER, EO P & S OR BUTTERFLY - 3/8" X 6" BOLTS WELDED TO STEEL BUCK WELDED TO STEEL B	JEL DEIALE A A .	SEE DEIALE A A .				
EO — PIPE & SLEEVE OR BUTTERFLY WOOD BUCK 3/8" X 6" LAG SCREW EO — PIPE & SLEEVE OR BUTTERFLY WINDOOD BUCK 3/8" X 6" LAG SCREW EO — PIPE & SLEEVE OR BUTTERFLY WASONRY BUCK 3/8" X 6" EXPANSION SHELLS WIRE MASONRY OR MASONRY "T" — GROUTED, WELDED TO STEEL HEADER, EO P&S OR BUTTERFLY — 3/8" X 6" BOLTS WELDED TO STEEL BUCK WELDED TO STEEL CHANNEL HEADER WELDEL TO STEEL CHANNEL HEADER WILL Z'' FROM EACH VERTICAL MEMBER & WILL SE WILL Z'' FROM EACH VERTICAL MEMBER & WILL SE WILL Z'' FROM EACH VERTICAL MEMBER & WILL SE WILL Z'' FROM EACH VERTICAL MEMBER & WILL SE WILL Z''' FROM EACH VERTICAL MEMBER & WILL SE WELDEL TO STEEL SE WELDEL TO STEEL SE WILL Z''' MAX FROM EACH VERTICAL MEMBER & WILL SE WELDEL TO STEEL S	ANCHORS & METHOD OF ATTACHMENT					
OR BUTTERFLY WOOD BUCK 3/8" X 6" LAG SCREW OR BUTTERFLY MASONRY BUCK 3/8" X 6" EXPANSION SHELLS WIRE MASONRY OR MASONRY "T" — GROUTED, WELDED TO STEEL HEADER, EO P&S OR BUTTERFLY — 3/8" X 6" BOLTS WELDED TO STEEL BUCK WELDED TO STEEL CHANNEL HEADER SILL """WELDED TO STEEL CHANNEL HEADER SILL """ROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """ FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """ FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """ FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """ FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """ FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """ FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """" FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """" FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """" FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """" FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """" FROM EACH VERTICAL MEMBER & @ MIDSPAN """" SILL """" FROM EACH VERTICAL MEMBER & @ MIDSPAN """"" SILL """" FROM EACH VERTICAL MEMBER & @ MIDSPAN """"" SILL """"" FROM EACH VERTICAL MEMBER & @ MIDSPAN """"""" SILL """"""" FROM EACH VERTICAL MEMBER & @ MIDSPAN """""""""""""""""""""""""""""""""""	ANCHOR TYPE		LOCATION			
WOOD BUCK 3/8" X 6" LAG SCREW SILL FO — PIPE & SLEEVE OR BUTTERFLY OR SEXPANSION SHELLS WIRE MASONRY BUCK 3/8" X 6" EXPANSION SHELLS WIRE MASONRY OR MASONRY "I" — GROUTED, WIELDED TO STEEL HEADER, EO P&S OR BUTTERFLY 3/8" X 6" BOLTS WELDED TO STEEL BUCK WELDED TO STEEL BUCK BABBORY WELDED TO STEEL CHANNEL HEADER BABBORY WELDEL TO STEEL CHANNEL HEADER BABBORY BABBORY WELDEL TO STEEL CHANNEL HEADER BABBORY BABBORY WELDEL TO STEEL CHANNEL HEADER BABBORY		@ JAMB	12" MAX. FROM SILL, 8" FROM HEAD & 20" O.C.			
EO PIPE & SLEEVE OR BUTTERFLY MASONRY BUCK 9 HEAD **2" FROM EACH VERTICAL MEMBER & 20" O.C. 3/8" X 6" EXPANSION SHELLS SILL WIRE MASONRY OR MASONRY OR MASONRY T'' - GROUTED, WELDED TO STEEL HEADER, EO P&S OR BUTTERFLY - 3/8" X 6" BOLTS WELDED TO STEEL BUCK ***WELDED TO STEEL BUCK ***WELDED TO STEEL BUCK ***WELDED TO STEEL CHANNEL HEADER 5 JAMB ****S" MAX. FROM SILL & 27.5" MAX. O.C. ***WELDED TO STEEL CHANNEL HEADER 5 JAMB ****S" MAX. FROM SILL & 27.5" MAX. O.C. ***WELDED TO STEEL CHANNEL HEADER 5 JAMB ****WELDED TO STEEL CHANNEL HEADER 5 JAMB ****WELDED TO STEEL CHANNEL HEADER 5 JAMB ****WELDED TO STEEL CHANNEL HEADER 5 JAMS. FROM EACH VERTICAL MEMBER & MIDSPAN 5 MAX. FROM EACH VERTICAL MEMBER & MIDSPAN 6 JAMB 5 MAX. FROM EACH VERTICAL MEMBER & MIDSPAN 6 JAMB 5 MAX. FROM EACH VERTICAL MEMBER & 14" O.C. 6 HEAD ****WELDED TO STEEL CHANNEL HEADER 6 JAMB 5 MAX. FROM EACH VERTICAL MEMBER & 0 MIDSPAN 6 JAMB 6 MIDSPAN 6 JAMB 6 MIDSPAN 6 JAMB 6 MIDSPAN 6 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 6 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 6 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 7 FROM EACH VERTICAL MEMBER & 14" O.C. 8 JAMB 8 MAX. FROM EACH VERTICAL MEMBER & 14" O.C. 8 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER & 14" O.C. 9 JAMB 7 FROM EACH VERTICAL MEMBER &		@ HEAD	**2" FROM EACH VERTICAL MEMBER & 14" O.C.			
OR BUTTERFLY OF HEAD OF HEAD		@ SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			
MASONRY BUCK 3/8" X 6" EXPANSION SHELLS SILL 2" FROM EACH VERTICAL MEMBER & 14" O.C. 2" FROM EACH VERTICAL MEMBER & © MIDSPAN WIRE MASONRY OR MASONRY "I" — GROUTED, WELDED TO STEEL HEADER, EO P&S OR BUTTERFLY — 3/8" X 6" BOLTS WELDED TO STEEL BUCK WELDED TO STEEL BUCK ### WELDED TO STEEL CHANNEL HEADER ### WELDED TO		@ JAMB	12" MAX. FROM SILL, 8" FROM HEAD & 20" O.C.			
WIRE MASONRY OR MASONRY "I" — GROUTED, WELDED TO STEEL HEADER, EO P&S OR BUTTERFLY 3/8" X 6" BOLTS WELDED TO STEEL BUCK		@ HEAD	**2" FROM EACH VERTICAL MEMBER & 14" O.C.			
MASONRY """ - GROUTED, WELDED TO STEEL HEADER, EO P&S OR BUTTERFLY - 3/8" X 6" BOLTS WELDED TO STEEL BUCK ### WELDED TO STEEL CHANNEL HEADER ### WELDED TO STEEL BUCK ### WELDED TO STEEL BUCK ### WELDED TO STEEL CHANNEL HEADER ### WILDED TO	3/8" X 6" EXPANSION SHELLS	@ SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			
WELDED TO STEEL HEADER, EO P&S OR BUTTERFLY - 3/8" X 6" BOLTS SILL 2" FROM EACH VERTICAL MEMBER & @ MIDSPAN ### WELDED TO STEEL BUCK ### WELDED TO STEEL BUCK ### WELDED TO STEEL BUCK ### HEAD ### WELDED TO STEEL CHANNEL HEADER WOOD STUD ### WOOD STUD ### MAX FROM SILL & 27.5" MAX. O.C. #### WELDED TO STEEL CHANNEL HEADER ##### JAMP JAMP JAMP JAMP JAMP JAMP JAMP JAMP		@ JAMB	8" MAX. FROM EACH END & 16" O.C.			
SILL 2" FROM EACH VERTICAL MEMBER & @ MIDSPAN	WELDED TO STEEL HEADER,	@ HEAD	***WELDED TO STEEL CHANNEL HEADER			
WELDED TO STEEL BUCK		© SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			
© SILL 2" FROM EACH VERTICAL MEMBER & @ MIDSPAN WOOD STUD		@ JAMB	***5" MAX. FROM SILL & 27.5" MAX. O.C.			
WOOD STUD © JAMB 5" MAX. FROM SILL & 27.5" MAX. O.C. METAL STUD © HEAD **2" MAX. FROM EACH VERTICAL MEMBER & 14" O.C	WELDED TO STEEL BUCK	@ HEAD	***WELDED TO STEEL CHANNEL HEADER			
METAL STUD @ HEAD **2" MAX. FROM EACH VERTICAL MEMBER & 14" O.C		@ SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			
METAL STUD	WOOD STUD	@ JAMB	5" MAX. FROM SILL & 27.5" MAX. O.C.			
(NO FLOOR ANCHORS) @ SILL 2" FROM EACH VERTICAL MEMBER & @ MIDSPAN		@ HEAD	**2" MAX. FROM EACH VERTICAL MEMBER & 14" O.C.			
	(NO FLOOR ANCHORS)	@ SILL	2" FROM EACH VERTICAL MEMBER & @ MIDSPAN			

**FOR 6' & UP HEAD MEMBERS. FOR HEADS LESS THAN 6', LOCATE ANCHORS 2" MAX. FROM EACH VERTICAL MEMBER & @ MIDPOINT OF SPAN.

MEMBER & ® MIDPOINT OF SPAN.

******I/A" THICK MAX, SHIM PLATES (2" WIDE X 7" LONG OR TO SUIT JAMB DEPTH) WELDED TO STEEL
CHANNEL & FRAMES WELDED TO SHIM PLATES, SHIM PLATES TO BE 1-1/4" CREATER THAN JAMB DEPTH.
HEADER WELDS LOCATED 3" FROM EACH JAMB & 3" FROM EACH SIDE OF VERTICAL MULLIONS & ® MIDPOINT
OF SPAN OF HEAD ABOVE DOORS, WELDS ARE MIN. 3/16" X 1" LONG, SHIM PLATES ARE PROVIDED BY
OTHERS, AFTER WELDING FRAME TO SHIMS, CAULK GAPS BETWEEN FRAME AND STRUCTURAL STEEL CHANNEL
WHERE SHIM PLATES ARE VOID.

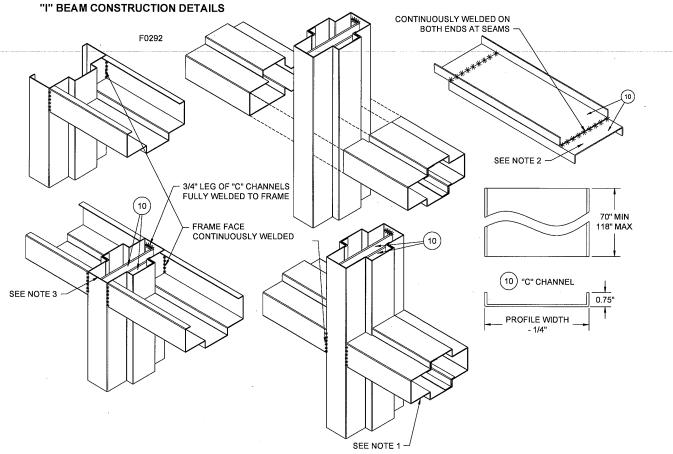


ISSUE	Ceco Door	VOL:	4
	ASSA ABLOY	SEC:	11
Intertek # 2112114	Windstorm Resistant Window Frame Elevations	ILL:	3

DRAWN BY: BNR

ALL LOCATIONS

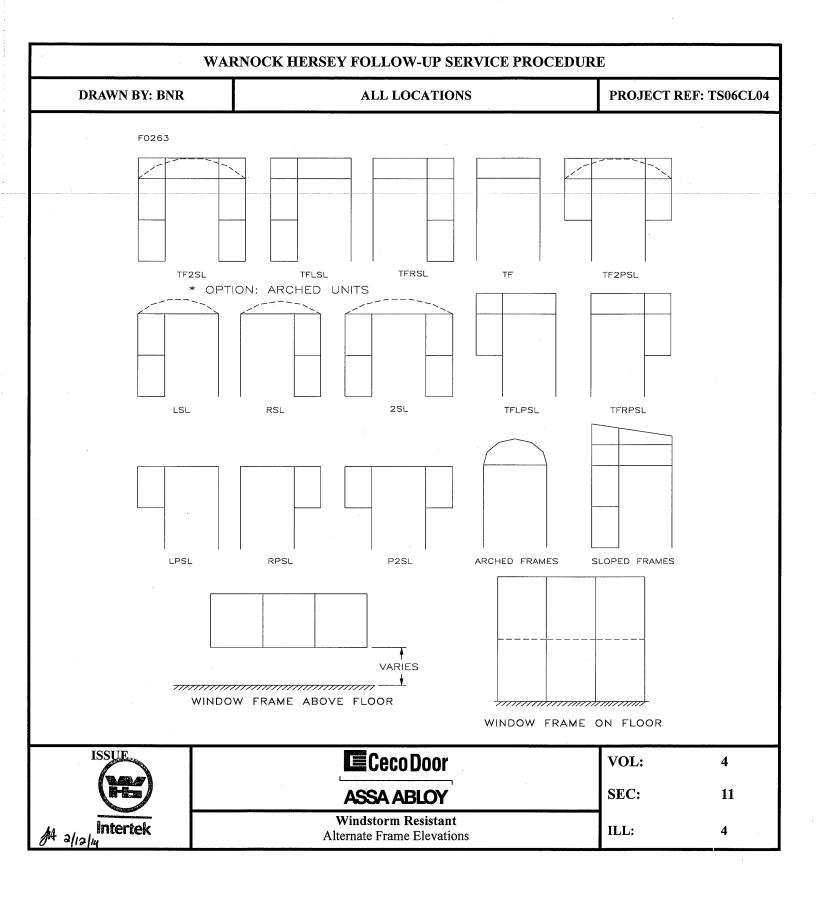
PROJECT REF: TS03CL61



NOTE:

- 1. MULLIONS MUST RUN THROUGH HEADS, SILLS, OR JAMBS AND BE REINFORCED WITH 10 GAUGE "C" CHANNELS (ITEM 10) IF EQUAL TO OR GREATER THAN 6' IN LENGTH.
- 2. 10 GA. "C" CHANNELS MUST BE INSTALLED BEFORE WELDING TOGETHER. OFFSET 3/4" ON EACH END.
- 3. EQUALLY SPACED AT EACH END OF MULLION.

ISSUE	Ceco Door	VOL:	4
	ASSA ABLOY	SEC:	11
Intertek f alaliy	Windstorm Resistant "I" Beam Construction Details	ILL:	3A



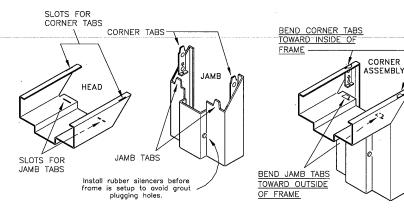
DRAWN BY: JRB

ALL LOCATIONS

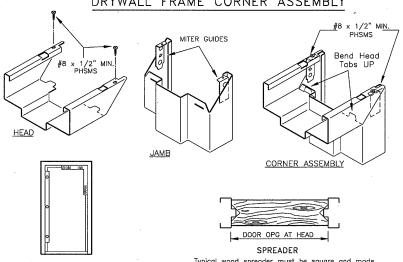
PROJECT REF: TS11CL05

F0282

CONVENTIONAL FRAME CORNER ASSEMBLY



DRYWALL FRAME CORNER ASSEMBLY



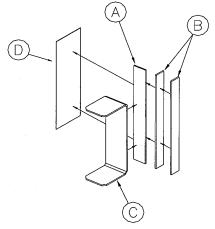
SQUARING THE FRAME The installer should use wood spreaders, a carpenters level and a carpenters square. Set the frame in the desired location. Level head and plumb jambs. Shim under jambs if necessary. Typical wood spreader must be square and made from lumber at least 1" thick. Length of spreader equals door opening width at the head. Cut clearance notches for frame stops as shown. Spreader must be nearly as wide as frame depth for proper installation.



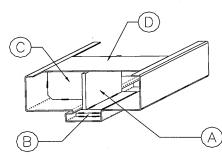
DRAWN BY: JRB

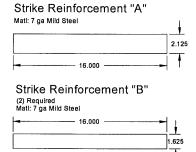
ALL LOCATIONS

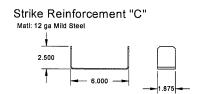
PROJECT REF: TS11CL05

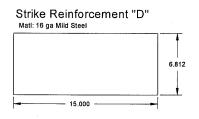


Strike Reinforcement Assembly



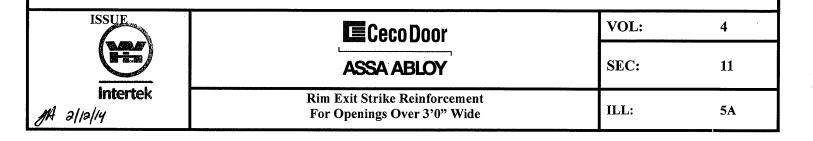






Strike Reinforcement Required for Trio and Trio-E Doors Over 3'0" Wide with Rim Exit Devices

F0299



WARNOCK HERSEY FOLLOW-UP SERVICE PROCEDURE **DRAWN BY: JRB ALL LOCATIONS** PROJECT REF: TS13CL05 F0311 SURFACE VERTICAL ROD HEAD REINFORCEMENT REQUIRED FOR ±70PSF TRIO/TRIO-E PAIRS OF DOORS WITH GLASS FRAME HEAD PLATE REINFORCEMENT 14 GA. (0.067" MIN) FRAME HEAD CHANNEL 14 GA. (0.067" MIN) REINFORCEMENT (LENGTH VARIES BY HARDWARE) 2" FACE HEAD MIN 4" FACE HEAD MAX KD OR WELDED ISSUE VOL: 4 **□** Ceco Door SEC: 11 assa abloy Intertek **Surface Vertical Rod Reinforcement** ILL:

For ±70 PSF Pairs With Glass

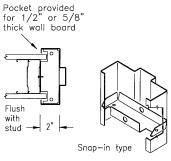
2/12/14

5B

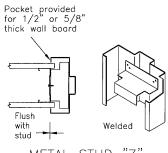
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ALL LOCATIONS

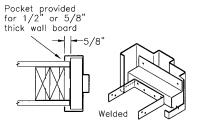
PROJECT REF: TS15CL05



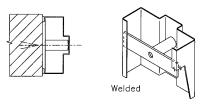
METAL STUD ANCHOR



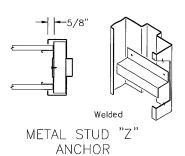
METAL STUD "Z" ANCHOR



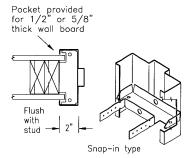
WOOD STUD "Z" STRAP ANCHOR



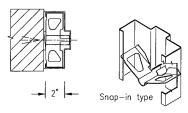
EXISTING OPENING ANCHOR



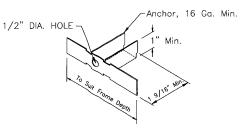
F0283



WOOD STUD ANCHOR (Used also for METAL STUD Walls)



EXISTING OPENING ANCHOR



OPTIONAL EXISTING OPENING ANCHOR



□Ceco Door

ASSA ABLOY

Windstorm Resistant
Stud Wall Frame Anchors

VOL:

4

SEC:

11

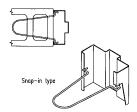
ILL:

6

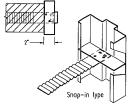
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ALL LOCATIONS

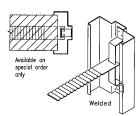
PROJECT REF: TS15CL05



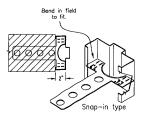
WIRE MASONRY ANCHOR



MASONRY "T" ANCHOR



YOKE AND STRAP MASONRY ANCHOR



MASONRY "T" ANCHOR (ADJUSTABLE)

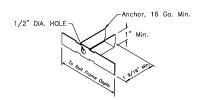








EXISTING OPENING ANCHOR

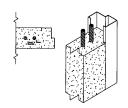


EXISTING OPENING ANCHOR

OPTIONAL EXISTING OPENING ANCHOR



STANDARD FLOOR ANCHOR



POURED IN PLACE WALL

F0284 A



■Ceco Door

ASSA ABLOY

Windstorm Resistant Masonry Wall Frame Anchors VOL:

4

SEC:

11

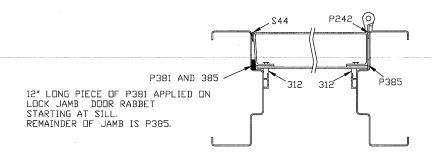
ILL:

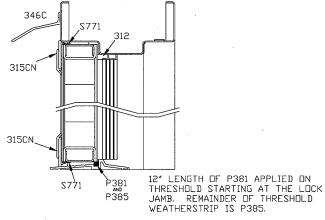
6**A**

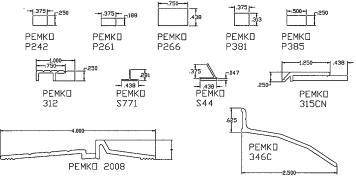
DRAWN BY: JRB

ALL LOCATIONS

PROJECT REF: TS13CL06







WEATHER STRIP FOR WATER INFILTRATION SINGLE DOORS PER TAS DESIGN PRESSURE 50 PSF

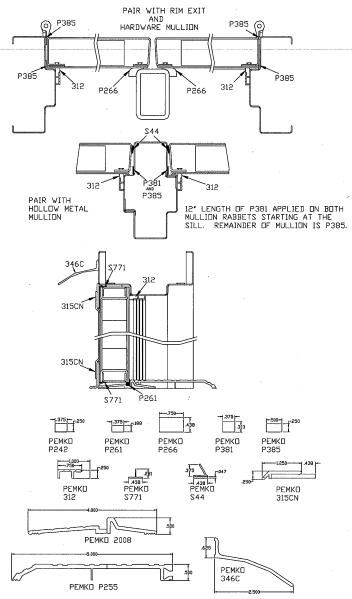
F0305

ISSUE Intertek M 2/12/14	□ Ceco Door	VOL:	4
	ASSA ABLOY	SEC:	11
	Water Infiltration Preparations Single Swing	ILL:	6B

DRAWN BY: JRB

ALL LOCATIONS

PROJECT REF: TS13CL06



WEATHER STRIP FOR WATER INFILTRATION
PAIRS OF DOORS PER TAS 202 DESIGN PRESSURE 60 PSF

F0306

ISSUE	Ceco Door	VOL:	4
	ASSA ABLOY	SEC:	11
Intertek #4 2/12/14	Water Infiltration Preparations Standard Swing Pair	ILL:	6C

DRAWN BY: JRB

ALL LOCATIONS

PROJECT REF: TS13CL05

Label for Windstorm Resistant Frames



LISTED EXTERIOR DOOR FRAME, TRANSOM, SIDELIGHT OR WINDOW FRAME INACCORDANCE WITH ANSI/SDI-BHMA A250.13 WINDSTORM RESISTANCE IMPACT RATING: 350 FT-LBS

DESIGN LOAD RATING PSF
PRODUCT CONFORMS TO ASTM E330/E1886/E1996
TAS-201, TAS-202, TAS-203 TEST PROTOCOLS

242757
ASSA ABLOY

7000747

The label design has the following information:

- 1. WH classified logo
- 2. Ceco Door/ASSA ABLOY Logo
- 3. WH assigned W/N Number (20824)
- 4. Complimentary classification (Windstorm Resistant Frame)
- 5. Design Load Rating & Impact Rating
- 6. ANSI/ASTM/TAS Test Number References
- 7. Ceco part number (7000747)

Labels will be metal with holes for fastener attachment.

