

UNILUX GmbH

SERIES "DK" ALUMINUM CLAD

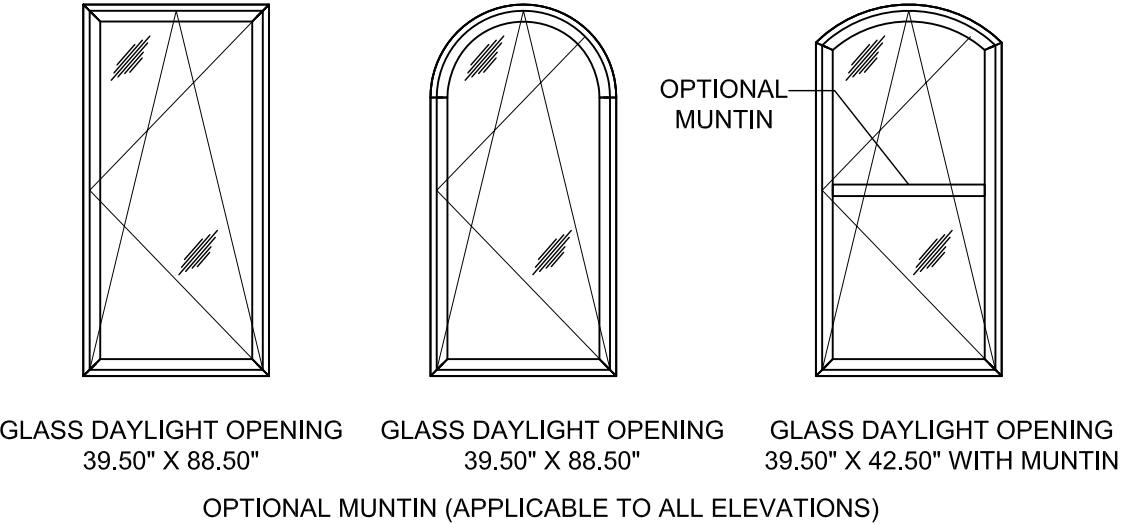
WOOD TILT & TURN WINDOW

INSTALLATION ANCHORAGE DETAILS

GENERAL NOTES:

1. THIS PRODUCT HAS BEEN EVALUATED TO COMPLY WITH THE CURRENT PROVISIONS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING THE HIGH VELOCITY HURRICANE ZONES (HVHZ) AND IS BASED ON TESTING CONDUCTED TO TAS-202, 201 & 203 TEST PROTOCOLS.
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE, MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
3. 1 BY BUCK OVER MASONRY AND/OR CONCRETE IS OPTIONAL. WHERE 1 BY BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPERATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSABILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF THE INSTALLATION METHODS DEVIATE FROM THESE APPROVED DETAILS THIS WOULD REQUIRE FURTHER INVESTIGATION BY A LICENSED OR REGISTERED DESIGN PROFESSIONAL.
5. ALL SETTING BLOCKS AND GASKET MATERIALS SHALL BE IN COMPLIANCE WITH THE CURRENT EDITION OF THE FLORIDA BUILDING CODE. SETTING BLOCKS SHALL BE NEOPRENE WITH A 70 TO 90 SHORE A DUROMETER. GASKET MATERIALS SHALL BE EDPM WITH A MINIMUM 60 SHORE A DUROMETER.
6. IN NON-HVHZ OR HVHZ AREAS WHERE WINDBORNE DEBRIS PROTECTION REQUIREMENTS EXIST, USE OF AN IMPACT PROTECTIVE SYSTEM COMPLYING WITH THE FBC REQUIREMENTS FOR WINDBORNE DEBRIS REGIONS IS NOT REQUIRED FOR THE PRODUCT(S) HEREIN.
7. MATERIALS:
- 7.1 FRAME: WOOD WITH SPECIFIC GRAVITY = 0.50
- 7.2 CLADDING: ALUMINUM 6063-T5
- 7.3 MISC. COMPONENTS: ALUMINUM 6063-T5
8. GLAZING:
- 8.1 GLASS MEETS THE REQUIREMENTS OF ASTM E1300-04e01.
- 8.2 SEE GLAZING DETAIL ON SHEET 7 OF 9.
- 8.3 GLASS SHALL MEET SAFETY GLAZING REQUIREMENTS PER CURRENT EDITION OF THE FLORIDA BUILDING CODE.
- 8.4 LAMINATED GLASS INTERLAYER: KURARAY AMERICA SENTRYGLAS PER CURRENT MIAMI-DADE NOTICE OF ACCEPTANCE (NOA).
9. DESIGNATIONS "X" STAND FOR THE FOLLOWING:
- X: OPERABLE

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8	---	COMPONENTS
9	---	HARDWARE DETAIL



10. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH A LOAD BEARING SHIM, SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
11. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS. ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER BELOW. SEE ANCHOR TABLE ON SHEETS 3 OF 9 FOR ANCHOR QUANTITIES, MIN. EMBEDMENT AND EDGE DISTANCES FOR APPROVED SUBSTRATES SHOWN.
12. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
- A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55 (HVHZ) OR 0.42 (NON-HVHZ).
- B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI.
- C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, MEDIUM WEIGHT (DENSITY > 117PCF)
- D. METAL STUD: STEEL 18 GA., FY= 33 KSI.

DESIGN PRESSURE RATING (PSF)		
LARGE MISSILE IMPACT RATING		
MAX. OVERALL TESTED FRAME SIZE (IN)	MAX. DESIGN PRESSURE (PSF)	UNIT TYPE
48" x 96"	± 80	TILT N TURN
GLAZING REQUIREMENTS - SEE SHEET 7 FOR DETAILS		
APPROXIMATELY 1-1/4" THICK OVERALL 0.250" TEMPERED GLASS / .470" AIRSPACE; ALUMINUM SPACER / 0.1875" HEAT STRENGTHENED GLASS / 0.115" SG BY KURARAY AMERICA / 0.1875" HEAT STRENGTHENED GLASS (EXTERIOR TO INTERIOR)		

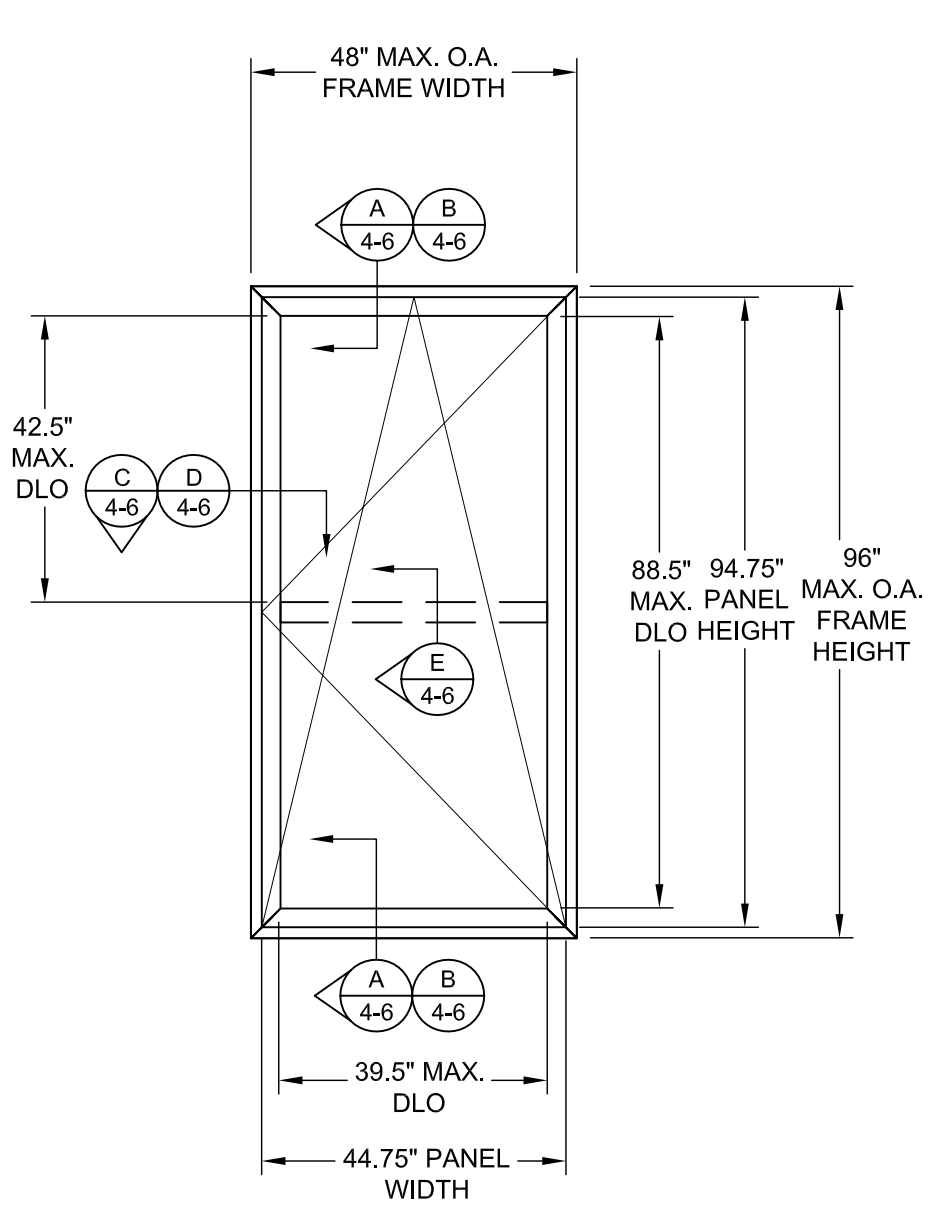
			RJA	BY
			9/30/17	DATE
		UPDATE TO 6TH ED. (2017) FBC		
		DESCRIPTION		
		REV	A	

UNILUX GMBH		NIKOLAUS-MEETH-STR. 1, DE 54528 SALMTAL, GERMANY	
TITLE: SERIES "DK" ALUM. CLAD WOOD TILT N TURN WINDOW		GENERAL AND INSTALLATION NOTES	
DRAWN BY: JRM		DATE: 05/11/15	
SCALE: N.T.S.		DRAWING NO: NL_0025	
REV: A		SHEET: 1 OF 9	

ROBERT J. AMORUSO
FL. P.E. NO. 49752

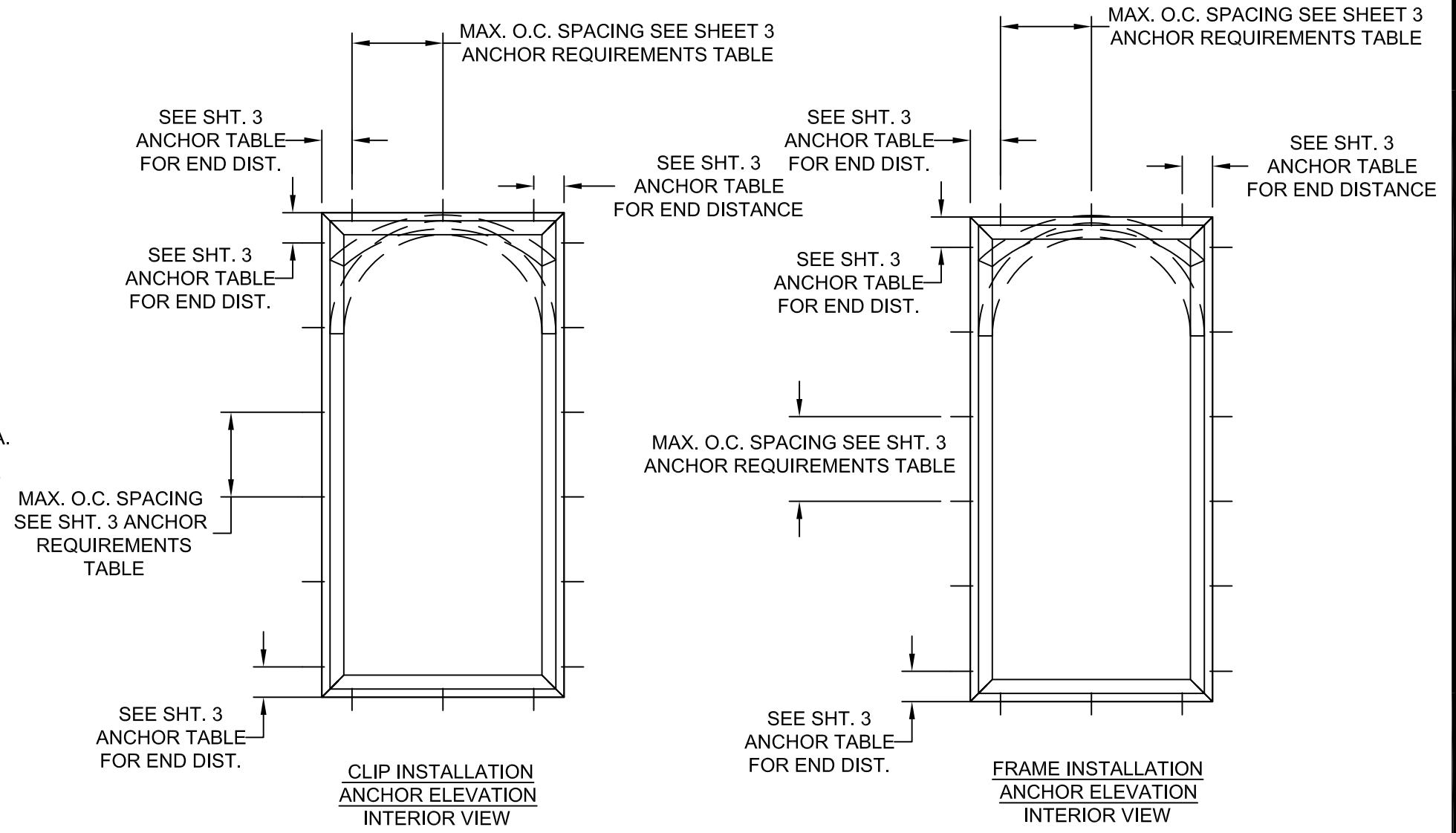
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Date: 2017.10.01 14:43:57 -04'00'

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ORLANDO, FL 32828
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SERIES "DK" ALUMINUM CLAD WOOD
TILT AND TURN WINDOW ELEVATION
INTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
+ / - 80 PSF	LARGE MISSILE



UNILUX GMBH		NIKOLAUS-MEETH-STR. 1, DE 54528 SALMTAL, GERMANY	
TITLE: SERIES "DK" ALUM. CLAD WOOD TILT N TURN WINDOW ELEVATION AND ANCHOR LAYOUT		DATE: 05/11/15	9/30/17
DRAWN BY: JRM		SCALE: N.T.S.	UPDATE TO 6TH ED. (2017) FBC
REV: A		DRAWING NO: NL_0025	DESCRIPTION
SHEET: 2 OF 9		REV	BY

ROBERT J. AMORUSO
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Date: 2017.10.01 14:43:44 -04'00'

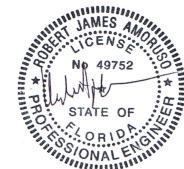
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INSTALLATION ANCHOR REQUIREMENTS TABLE										
ANCHOR REQUIREMENTS										
ANCHORING METHOD		SUBSTRATE		MIN. END DISTANCE (IN)	HD / SILL		JAMBS		MIN. EMBED. (IN)	MIN. EDGE DISTANCE (IN)
					QTY.	MAX SPACING (IN)	QTY.	MAX SPACING (IN)		
THROUGH FRAME		WOOD	MIN. 0.42 S.G. (NON-HVHZ) MIN. 0.55 S.G. (HVHZ)	6"	3	18"	7	14"	1-1/2	1
		CONCRETE	2500 PSI MIN. CONCRETE	6"	3	18"	7	14"	1-1/2	1-1/2
		CMU	ASTM C90 MED. WT. (DENSITY > 117 PCF) MASONRY (CMU) MIN.	6"	3	18"	7	14"	1	2
		METAL STUD	18 GA. Fty = 33KSI MIN.	6"	3	18"	7	14"	MIN. 3-THREAD	3/8
INSTALLATION CLIP		WOOD	MIN. 0.42 S.G. (NON-HVHZ) MIN. 0.55 S.G. (HVHZ)	4"	3	20"	7	14.75"	1-1/2	1
		CONCRETE	2500 PSI MIN. CONCRETE	4"	3	20"	7	14.75"	1-1/2	1-1/2
		CMU	ASTM C90 MED. WT. (DENSITY > 117 PCF) MASONRY (CMU) MIN.	4"	3	20"	7	14.75"	1	2
		METAL STUD	18 GA. Fty = 33KSI MIN.	4"	3	20"	7	14.75"	MIN. 3-THREAD	3/8
NOTES:	1)	CONCRETE AND MASONRY (BLOCK/CMU) SUBSTRATE ANCHORS TO BE 1/4" DIAMETER ITW ADVANCED THREADFORM TECHNOLOGIES CONCRETE SCREWS.								
	2)	WOOD FRAME SUBSTRATE ANCHORS USE NO. 14 WOOD SCREW ANCHORS (ANSI B18.6.1) WITH MIN. GRADE 2 STRENGTH.								
	3)	METAL FRAME SUBSTRATE ANCHORS USE NO. 14 TAPPING SCREW ANCHORS (B18.6.4) WITH MIN. GRADE 2 STRENGTH AND PAST THREE THREADS OF INTERIOR OF STEEL STUD.								

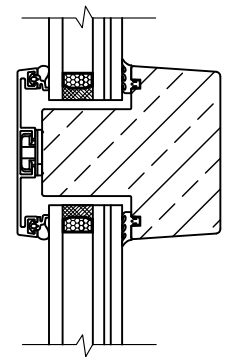
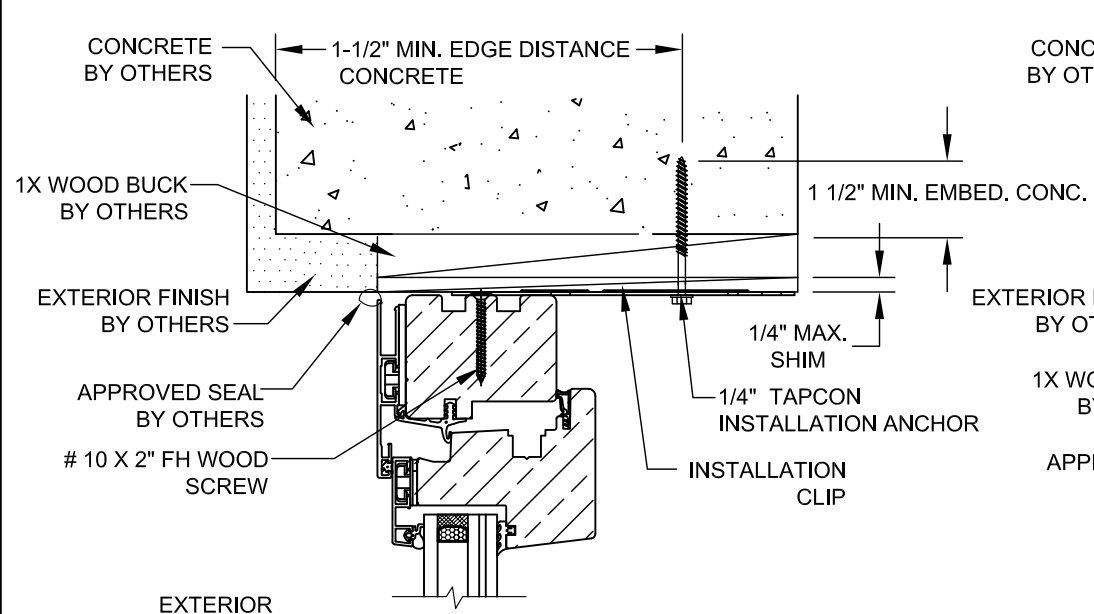
A	UPDATE TO 6TH ED. (2017) FBC	9/30/17	RJA		
REV	DESCRIPTION	DATE	BY		

UNILUX GMBH	
NIKOLAUS-MEETH-STR. 1, DE 54528 SALMTAL, GERMANY	
TITLE: SERIES "DK" ALUM. CLAD WOOD TILT N TURN WINDOW ANCHOR TABLE	
DRAWN BY:	JRM
DATE:	05/11/15
SCALE:	N.T.S.
DRAWING NO:	NL_0025
REV:	A
SHEET:	3 OF 9

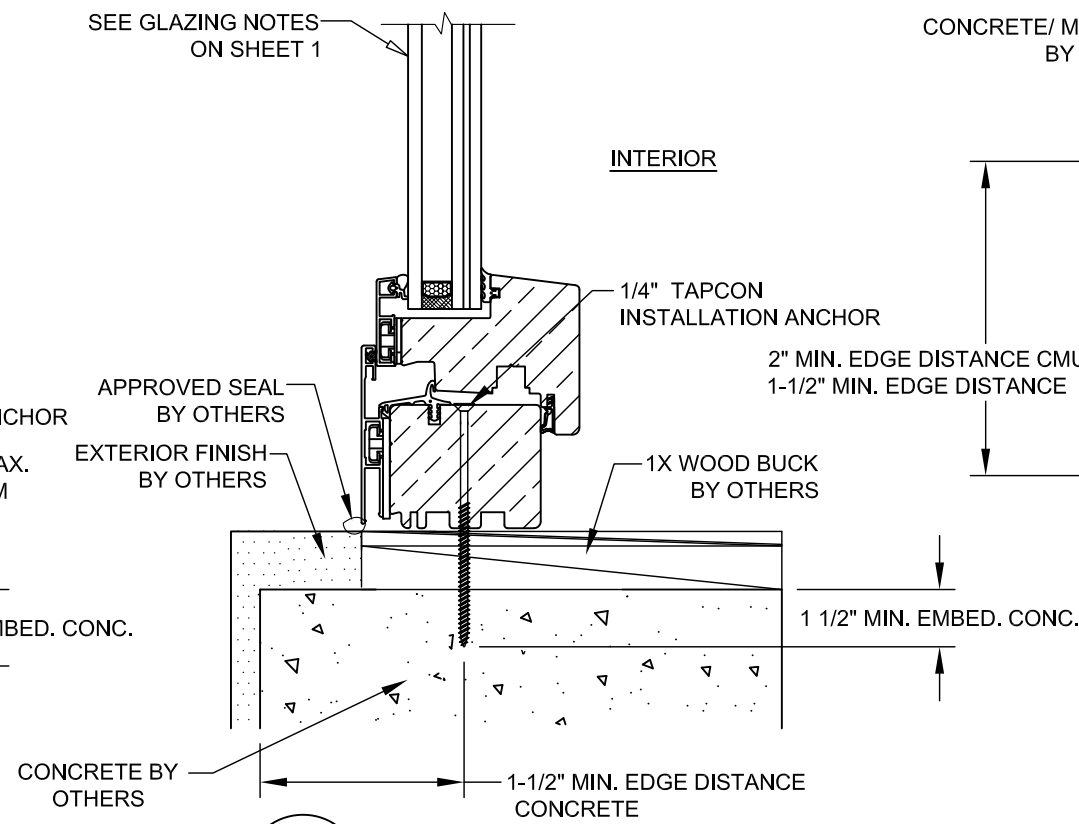
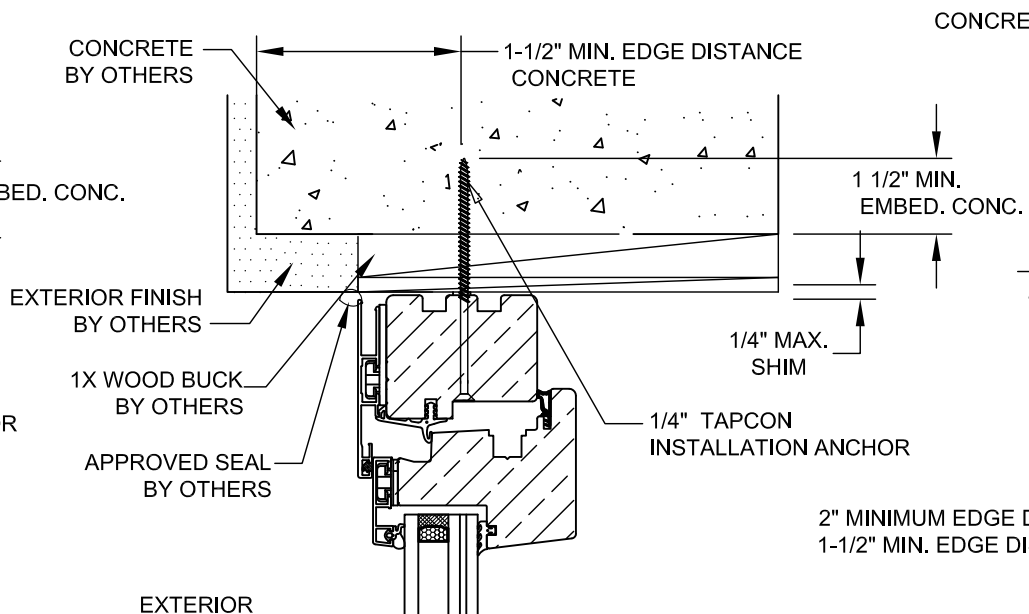
ROBERT J. AMORUSO
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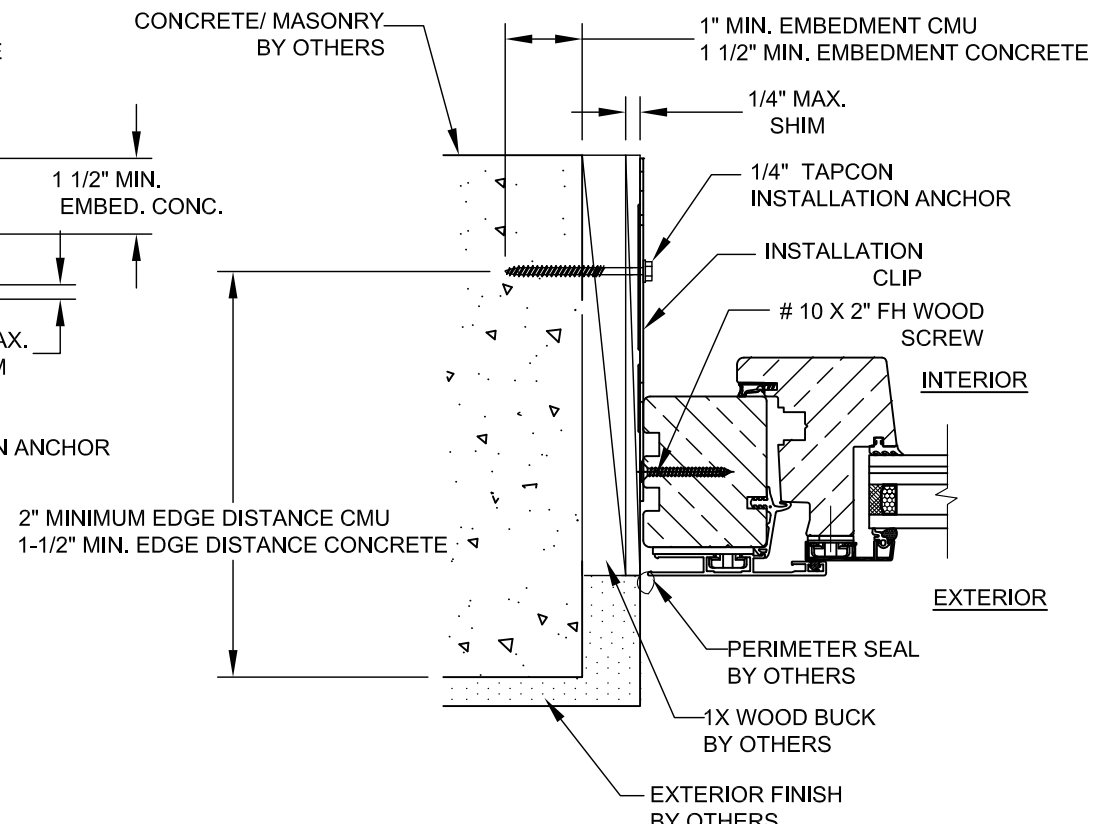
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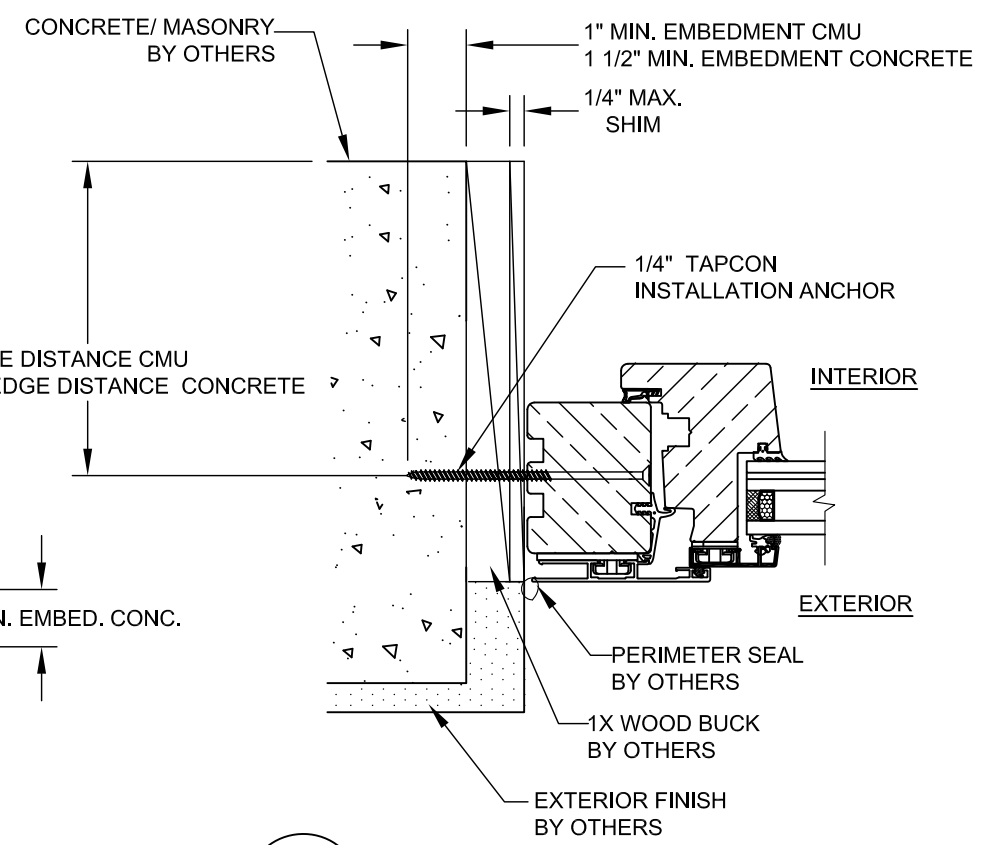
E
5 MUNTIN SECTION



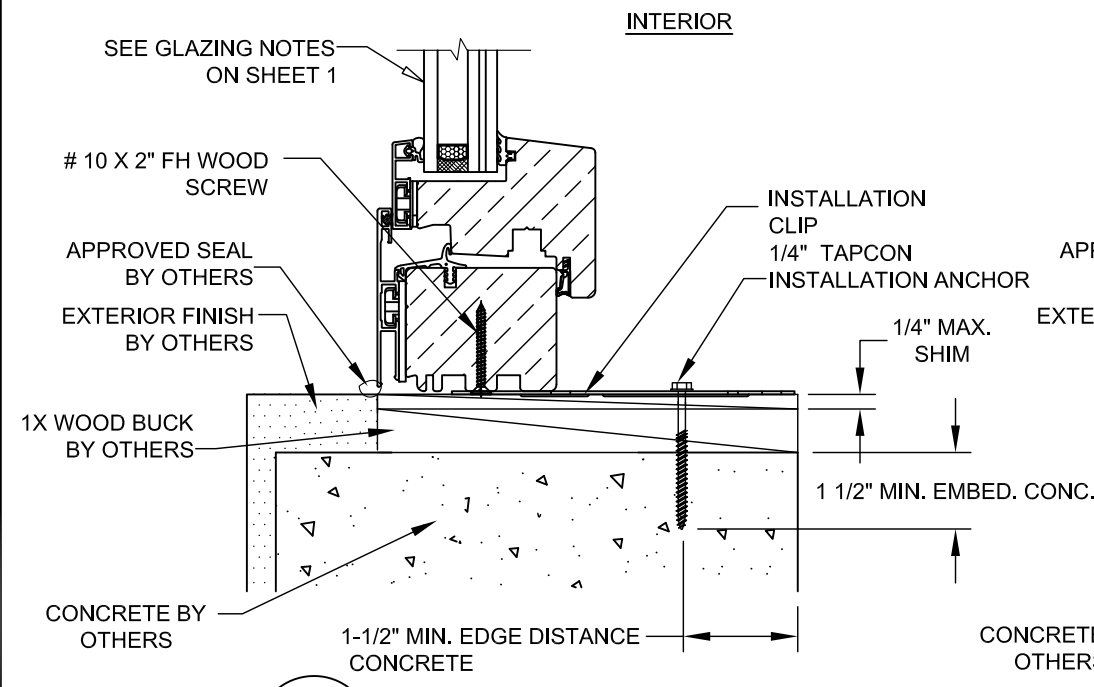
B
5 VERTICAL SECTION
CONCRETE SUBSTRATE



C
5 HORIZONTAL SECTION
INSTALLATION CLIP
CONCRETE/ MASONRY
SUBSTRATE

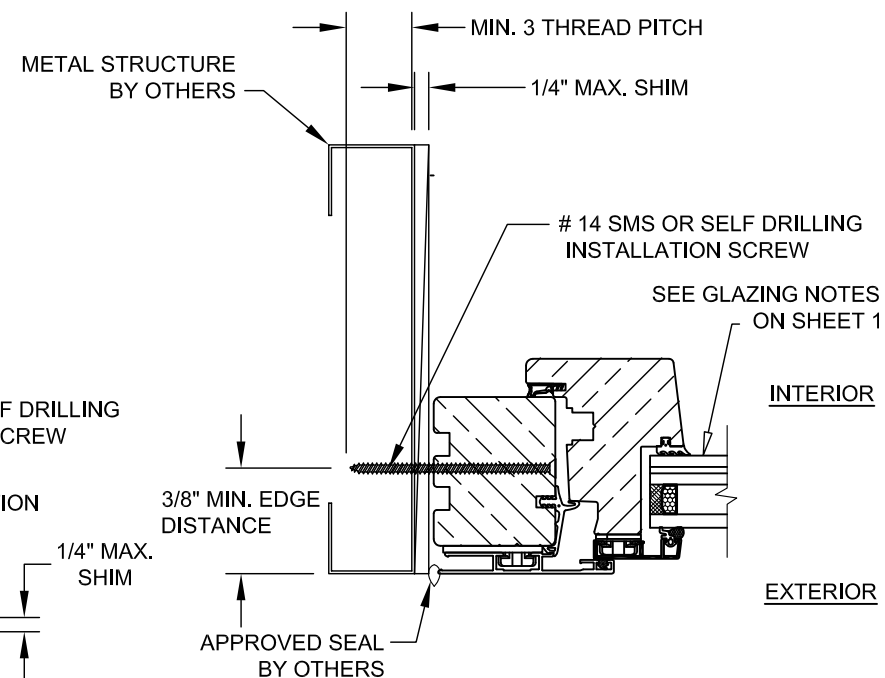
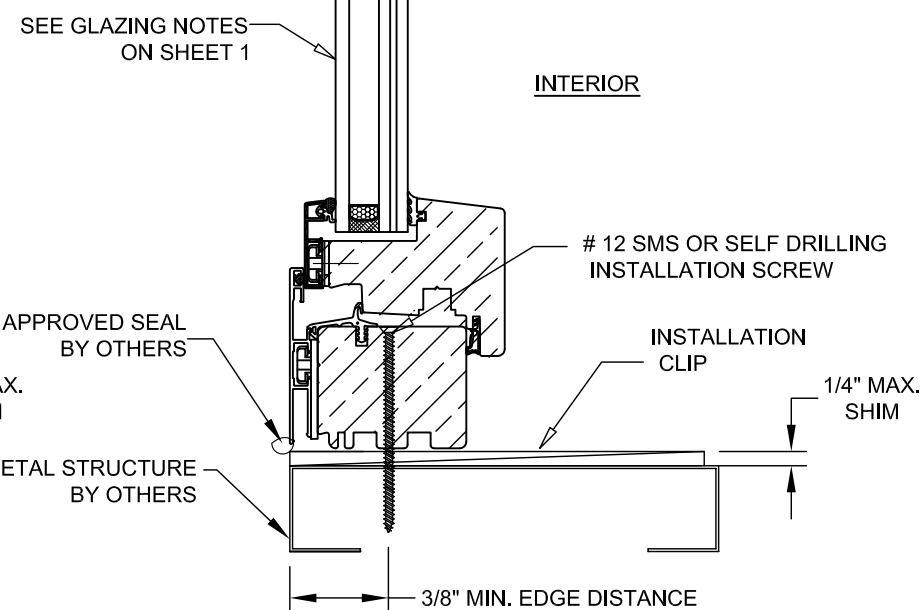
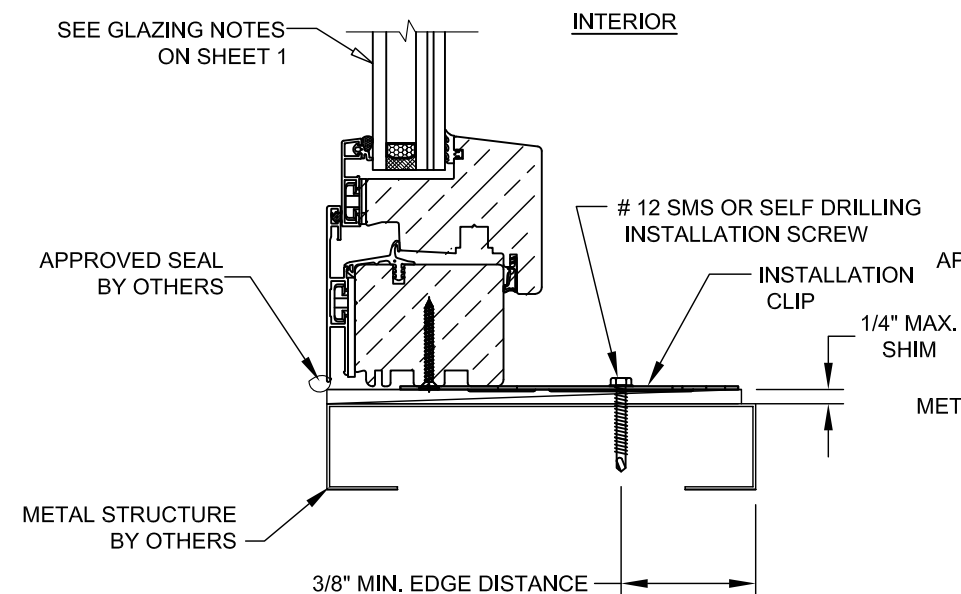
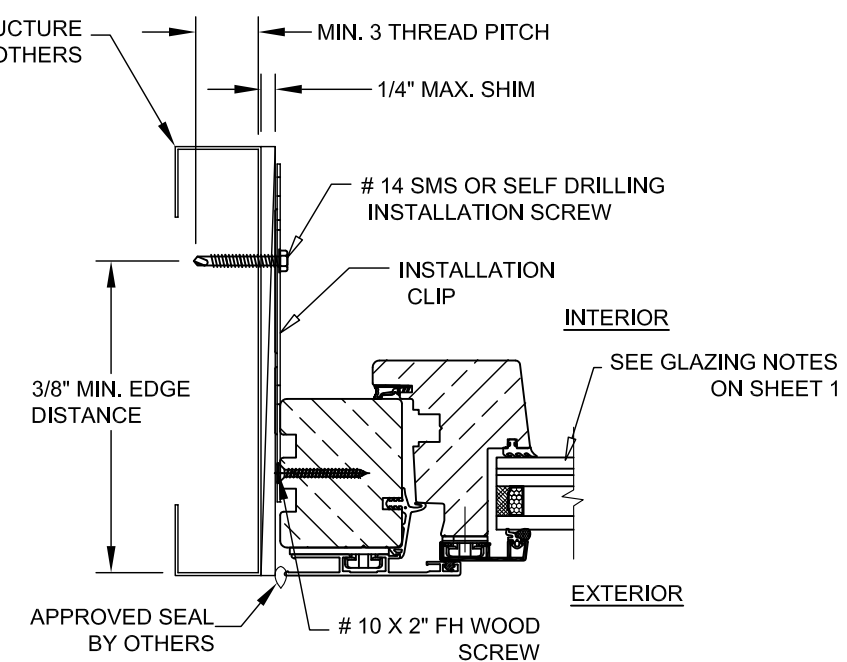
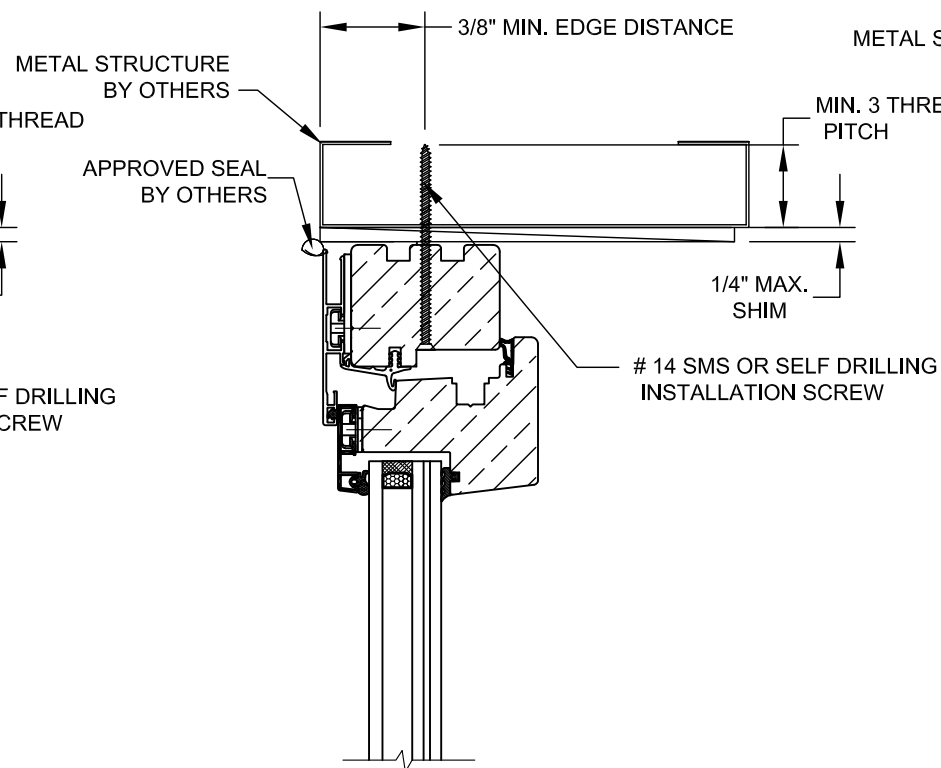
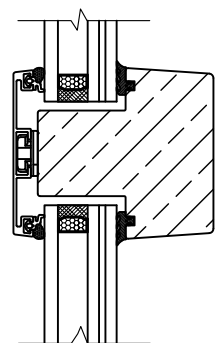


D
5 HORIZONTAL SECTION
CONCRETE/MASONRY
SUBSTRATE

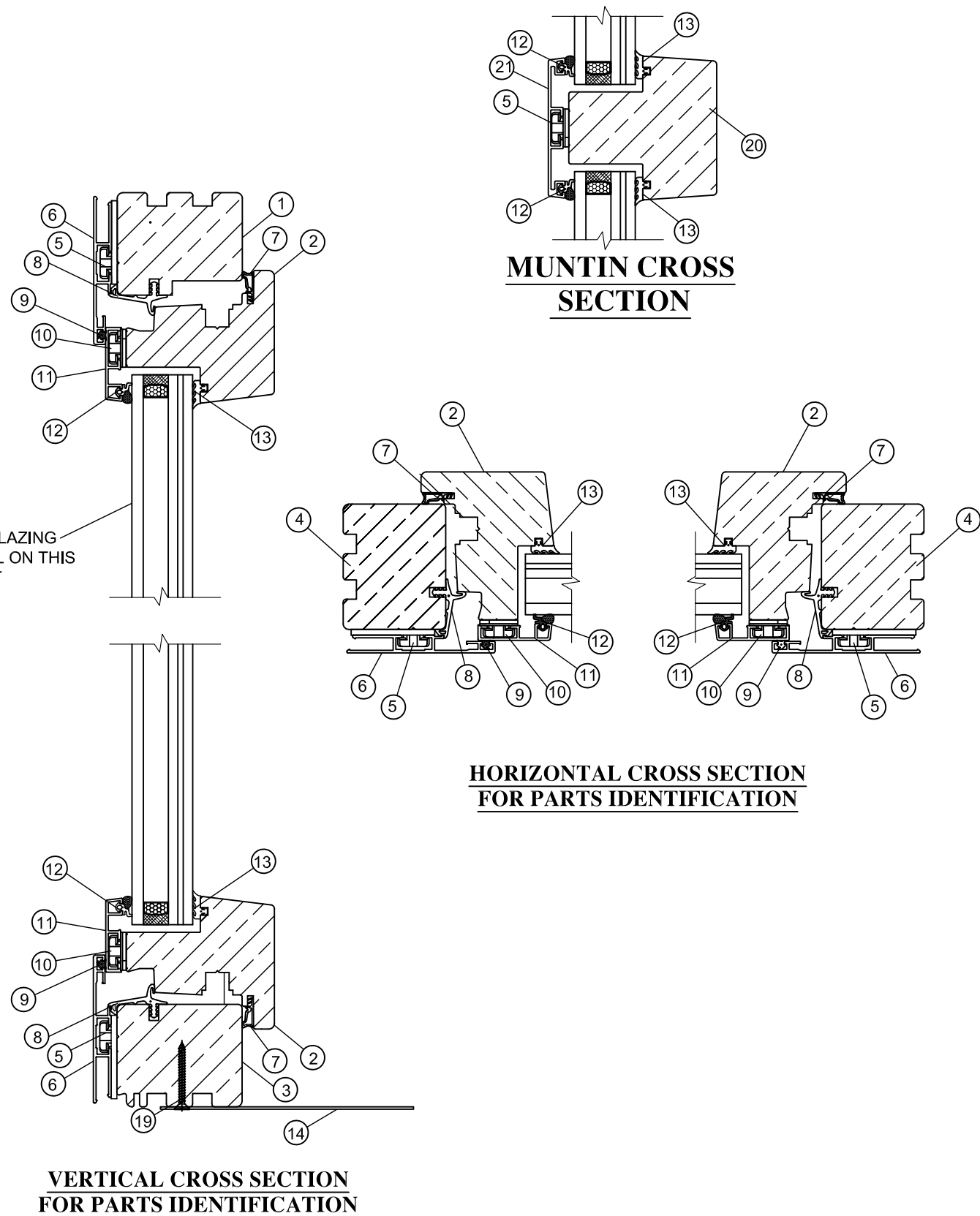


A
5 VERTICAL SECTION
CONCRETE SUBSTRATE

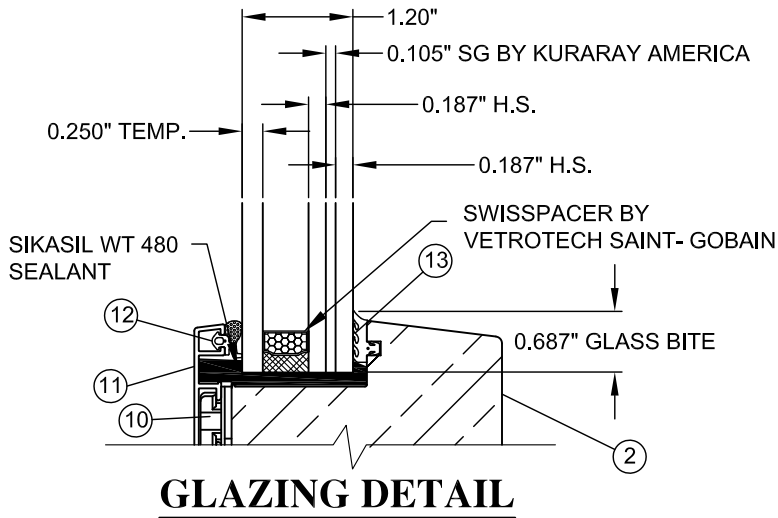
UNILUX GMBH		NIKOLAUS-MEETH-STR. 1, DE 54528 SALMTAL, GERMANY	
TITLE: SERIES "DK" ALUM. CLAD WOOD TILT N TURN WINDOW VERTICAL & HORIZ. INSTALLATION DETAILS		DRAWN BY: JRM	DATE: 05/11/15
		SCALE: N.T.S.	DRAWING NO: NL_0025
		REV: A	SHEET: 5 OF 9
ROBERT J. AMORUSO FL. P.E. NO. 49752		UPDATE TO 6TH ED. (2017) FBC	
Digitally signed by Robert J Amoruso Date: 2017.10.01 14:43:06 -04'00'		DESCRIPTION	
12472 LAKE UNDERHILL RD NO. 148 ORLANDO, FL 32828 robert.amoruso@comcast.net		DATE	
		BY	



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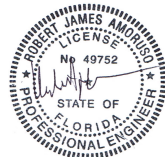
QTY.	PART NO.	DESCRIPTION	MANUFACTURER
1	F41-0007-1	FRAME TOP, WOOD G .50	UNILUX
2	F51-0001-39	SASH, TOP,, BOTT. & SIDE WOOD G .50	UNILUX
3	F41-0019-1	FRAME, BOTTOM WOOD G. .50	UNILUX
4	F41-0006-1	FRAME, SIDE JAMB WOOD G. .50	UNILUX
5	E41-0116	FRAME CLADDING FASTENER, PLASTIC GF 30	UNILUX
6	E51-0002	FRAME CLADDING, 6060-T5 ALUMINUM	UNILUX
7	E51-1006	SASH GASKET, EPDM 60 DUR	UNILUX
8	E51-1012	FRAME GASKET, RUBBER EPDM 70 DUR	UNILUX
9	E41-1003	FRAME GASKET EPDM DUR 80	UNILUX
10	E41-0114	SASH CLADDING FASTENER, PLASTIC GF 30	UNILUX
11	E55-0001	SASH CLADDING, 6060-T5 ALUMINUM	UNILUX
12	E41-1029	EXT. GLAZING GASKET EPDM DUR 80	UNILUX
13	E41-1002	INT. GLAZING GASKET EPDM DUR 80	UNILUX
14	PURCHASE	0.0551" THICK GALVANIZED INSTALLATION CLIP	SIMPSON
15	PURCHASE	GLAZING SEALANT, SIKASIL WT-480	SIKA
16	PURCHASE	1/4" SELF TAPPING INSTALLATION	UNILUX
17	PURCHASE	#14 P. PHD WOOD INSTALLATION SCREW	UNILUX
18	PURCHASE	1/4" I.T.W. A.T.T. MASONRY ANCHOR	UNILUX
19	PURCHASE	#8 X 1-1/4" WOOD SCREW	UNILUX
20	F51-0029-39	MUNTIN PROFILE , WOOD G.50	UNILUX
21	E55-0011	MUNTIN CLADDING, 6060-T5 ALUMINUM	UNILUX



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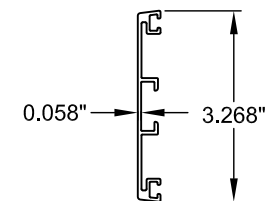
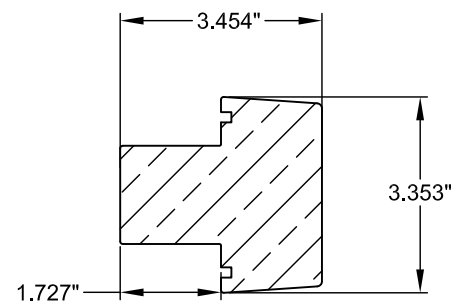
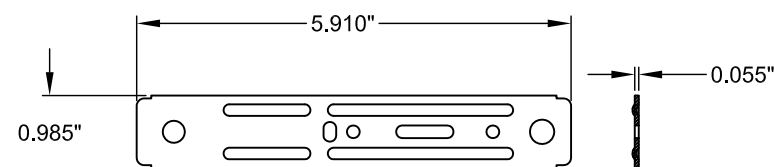
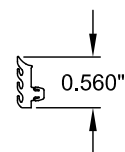
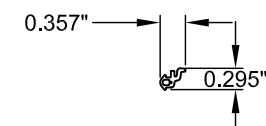
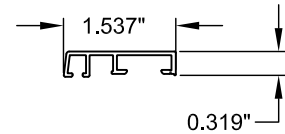
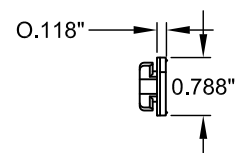
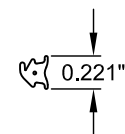
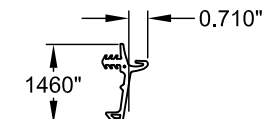
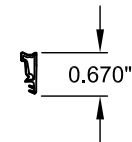
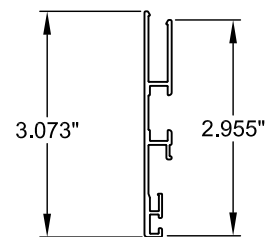
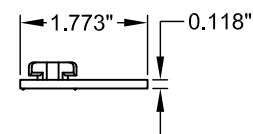
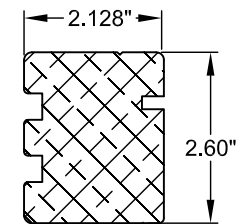
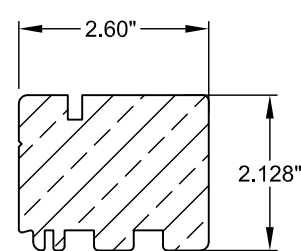
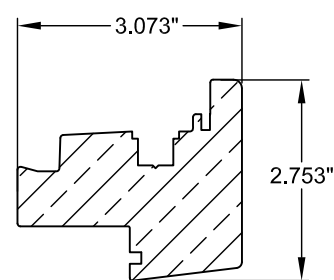
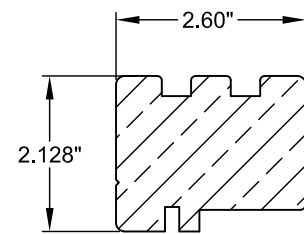
UNILUX GMBH		NIKOLAUS-MEETH-STR. 1, DE 54528 SALMTAL, GERMANY	
TITLE: SERIES "DK" ALUM. CLAD WOOD TILT N TURN WINDOW		DATE: 05/11/15	
B.O.M. CROSS SECTIONS & GLAZING DETAIL		DRAWING NO: NL_0025	
DRAWN BY: JRM		SHEET: 7 OF 9	
SCALE: N.T.S.		REV: A	

ROBERT J. AMORUSO
FL. P.E. NO. 49752



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Robert J Amoruso
Date: 2017.10.01
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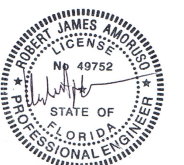
				RJA	BY
				9/30/17	DATE
			UPDATE TO 6TH ED. (2017) FBC		DESCRIPTION
			A		REV

UNILUX GMBH
NIKOLAUS-MEETH-STR. 1, DE 54528 SALMTAL, GERMANY

TITLE: **SERIES "DK" ALUM. CLAD WOOD TILT N TURN WINDOW COMPONENTS**

DATE:	05/11/15
DRAWING NO:	NL_0025
SHEET:	8 OF 9

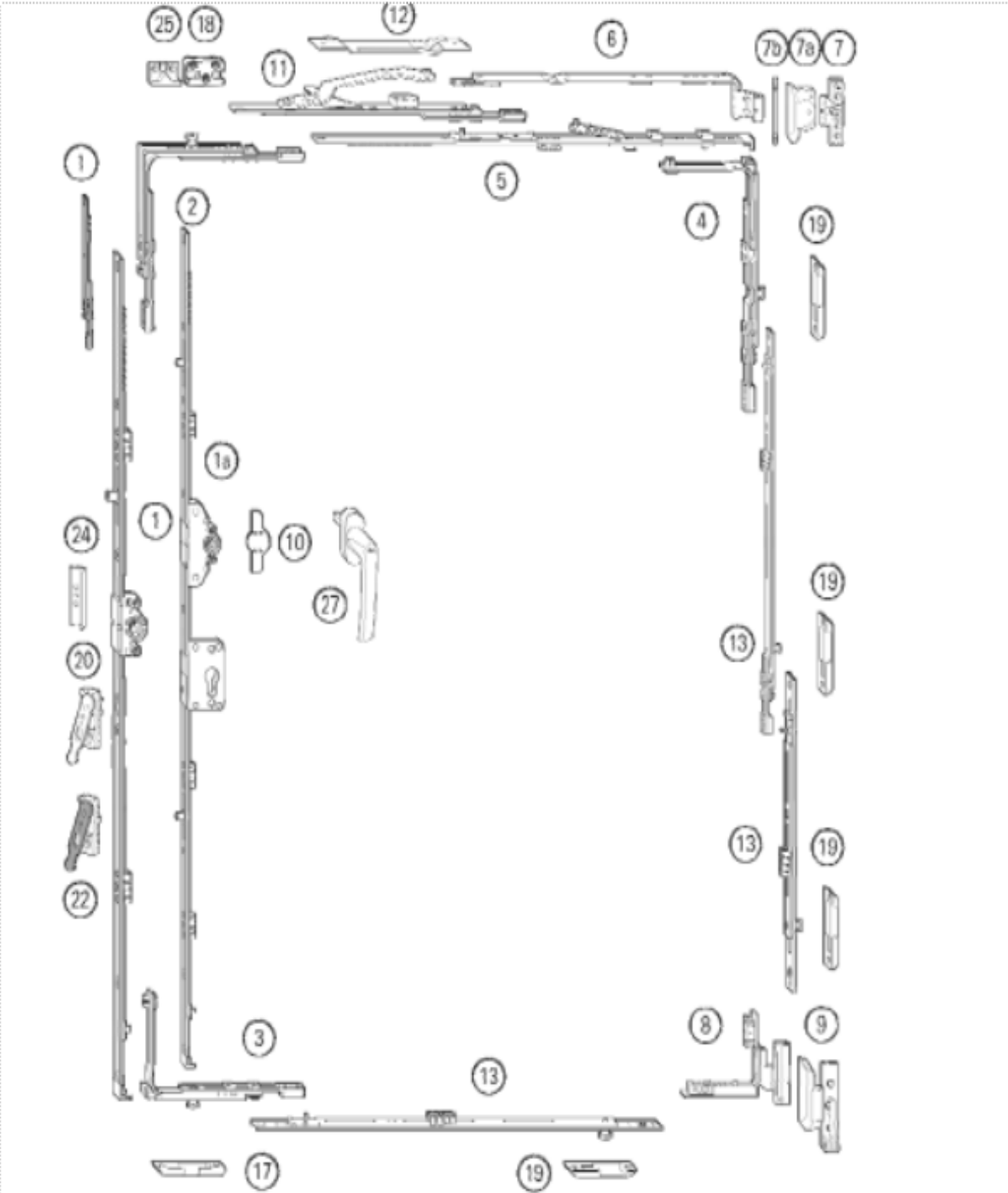
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Digitally signed by
Robert J Amoruso
Date: 2017.10.01
14:42:35 -04'00'

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comcast.net

QTY.	PART NO.	DESCRIPTION	MANUFACTURER
1	259853/308267	TILT/TURN LOCK GEAR	ROTO
2	260272	CORNER DRIVE HEAD FRONT	ROTO
3	260288	CORNER DRIVE BOTTOM FRONT	ROTO
4	260294	STAY CORNER DRIVE	ROTO
5	287528	SASH STAY GUIDE	ROTO
6	262377	STAY ARM	ROTO
7A	355618	MOULDING COVER AT HINGE	ROTO
7B	227354	HINGE PIN	ROTO
8	262388	REBATE CORNER HINGE	ROTO
9	355620	CORNER PIVOT RESET	ROTO
10	264601	DRILL PROTECTION	ROTO
11	315999	SCISSOR STAY, SASH PART	UNILUX
12	330595	SCISSOR STAY, FRAME PART	UNILUX
13	337711/296853	MULTIPART CENETER LOCK	UNILUX
14	296076/308267	TURN-ONLY LOCK GEAR	UNILUX
15	257138	SASH STAY GUIDE	UNILUX
16	337710	CENTER LOCK, HORIZONTAL	UNILUX
17	355608	STRIKER FOR TILT FUNCTION	UNILUX
18	355611	STRIKER HEAD	UNILUX
19	355610	SAFETY STRIKER	UNILUX
20	260538	SASH LIFTER, SASH PART	UNILUX
21	257600	SASH LIFTER, FRAME PART	UNILUX
22	284220	SPECIAL SASH LIFTER	UNILUX
23	330081	MAGNETIC CATCH, FRAME	UNILUX
24	329981	MAGNETIC CATCH	UNILUX
25	260527	SLOT-VENT	UNILUX
26	350403	REST BLOCK	UNILUX
27	GFORA	HANDLE	UNILUX

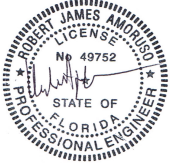


DK HARDWARE

			RJA	BY
			9/30/17	DATE
		UPDATE TO 6TH ED. (2017) FBC		DESCRIPTION
		A	REV	

UNILUX GMBH	
NIKOLAUS-MEETH-STR. 1, DE 54528 SALMTAL, GERMANY	
TITLE: SERIES "DK" ALUM. CLAD WOOD TILT N TURN WINDOW HARDWARE DETAILS	
DRAWN BY:	JRM
DATE:	05/11/15
SCALE:	N.T.S.
DRAWING NO:	NL_0025
REV:	A
SHEET:	9 OF 9

ROBERT J. AMORUSO
FL. P.E. NO. 49752



Digitally signed by
Robert J Amoruso
Date: 2017.10.01
14:42:19 -04'00'

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