IMPERIA

GLASS RAILING

ALU WIND
Aluminum Extrusions

Your Profile

IMPERIA

## GLASS RAILING

MIAMI-DADE COUNTY
APPROVED

K1-NOA #20-1021.03

- Designed for interior and exterior Railing Applications

- Tempered laminated glass with Sentryglas Interlayer

- Supports Surface Mount, Embed Mount, Inclined and Fascia Mounting Methods

- Fast and simple installation. Reduces Installation Labor Time by 50%

🌐 aluwindus.com

TOP OF SLAB OPTIONS

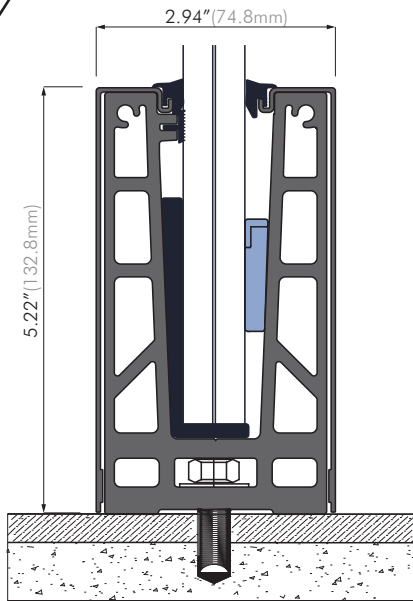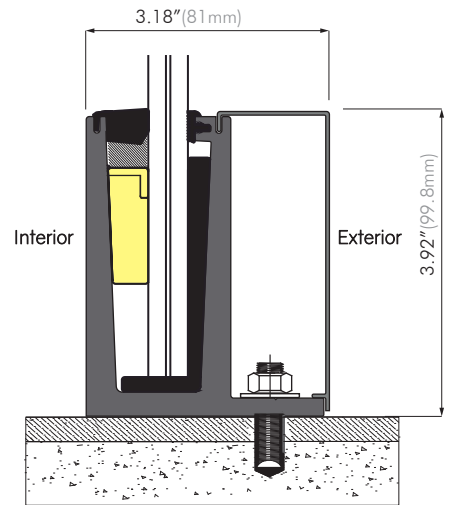

2.6″(66.5mm)

4.72″(120mm)

LED housing
KIT: K3
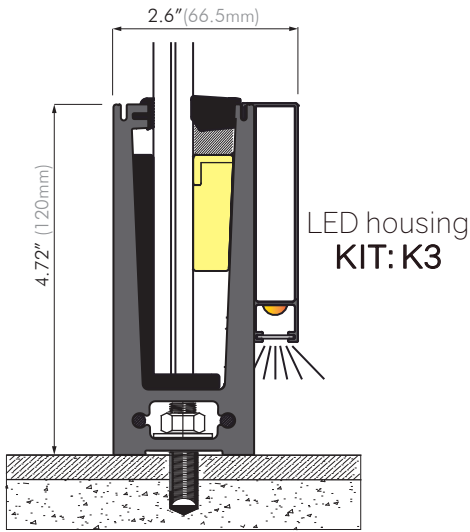
Top mount base shoe
(max. panel height 43″)
Continuous base shoe
KIT: K1

⚠ K1 UP TO
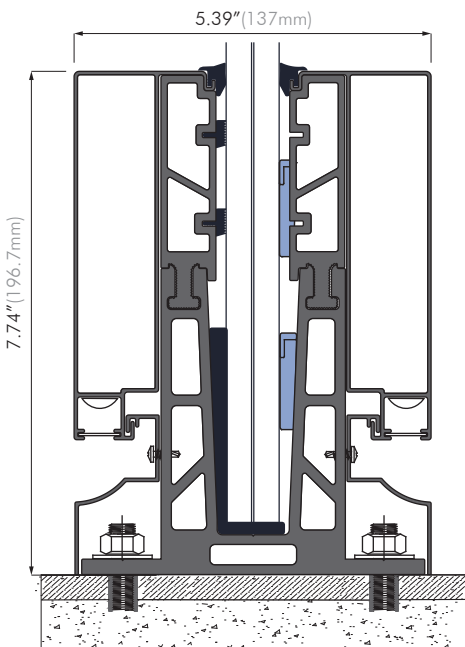771lb (350Kg.)
Use proper glazing

2.94″(74.8mm)

5.22″(132.8mm)

Top mount base shoe
(max. panel height 59″)
Continuous and modular base shoe
KIT: K15

⚠ K15 UP TO
1984lb (900Kg.)
Use proper glazing

3.18″(81mm)
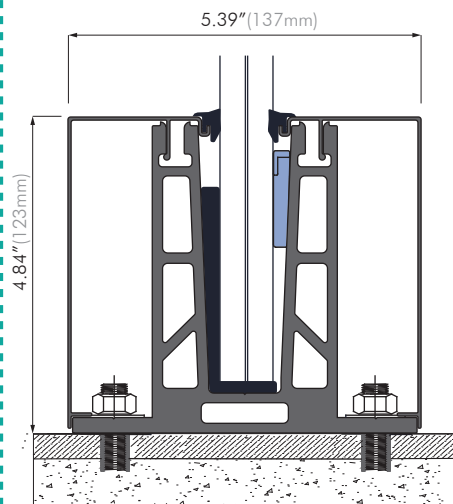
3.92″(99.8mm)

Interior   Exterior

F-Shaped Floor Mount
(max. panel height 19″)
Continuous base shoe
KIT: K16

⚠ K16 UP TO
330lb (150Kg.)
Use proper glazing

5.39″(137mm)

7.74″(196.7mm)

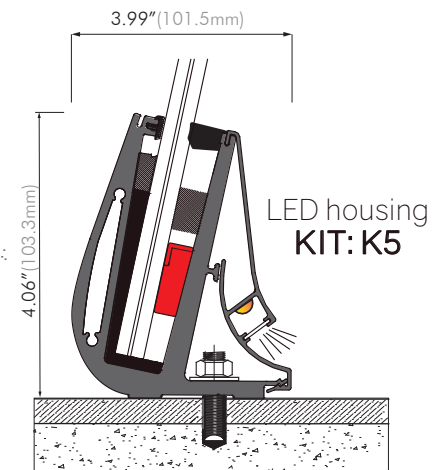Glass fence
(max. panel height 118″)
Continuous and modular base shoe
KIT: K11

⚠ K11 UP TO
1984lb (900Kg.)
Use proper glazing

5.39″(137mm)

4.84″(123mm)

Top mount base shoe
(max. panel height 43″)
Continuous and modular base shoe
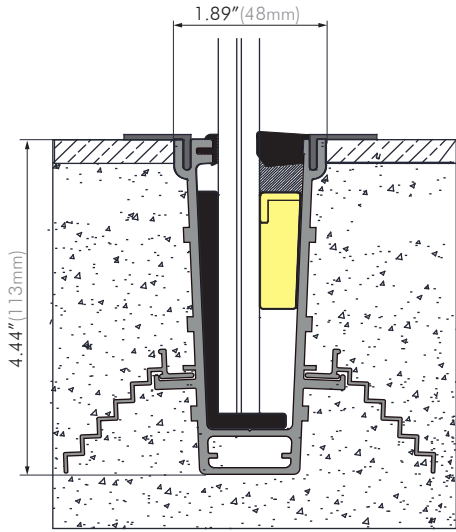**KIT: K14**

⚠ K14 UP TO
1433lb (650Kg.)
Use proper glazing

3.99″(101.5mm)

4.06″(103.3mm)

LED housing
KIT: K5

Curved base shoe
Continuous base shoe
KIT: K4

⚠ K4 UP TO
220lb (100Kg.)
Use proper glazing

ALU WIND
Aluminum Extrusions

TÜVRheinland
Precisely Right.

✓ 6063 Alloy
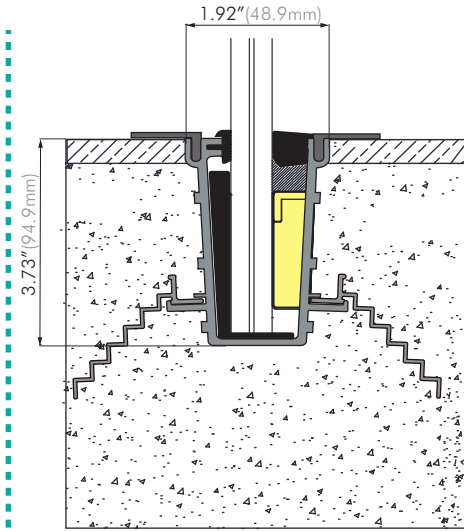✓ T6 Temper

MODULE OPTIONS

HANDRAIL OPTIONS

1.89"(48mm)

4.44"(113mm)

Embedded in slab
(max. panel height 43")

Continuous base shoe
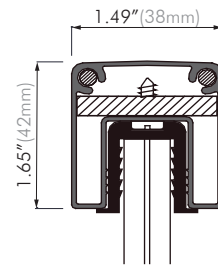**KIT: K6**

⚠ K6 UP TO
1322lb (600Kg.)
Use proper glazing

1.92"(48.9mm)

3.73"(94.9mm)

Embedded in slab
(max. panel height 19")

Continuous base shoe
KIT: K17

⚠ K17 UP TO
330lb (150Kg.)
Use proper glazing

2.16"(55mm)

1.69"(43mm)

LED
Handrail
KIT: K7

1.49"(38mm)

1.65"(42mm)

Square
Handrail
KIT: K8

2.28"(58mm)

1.90"(48.3mm)
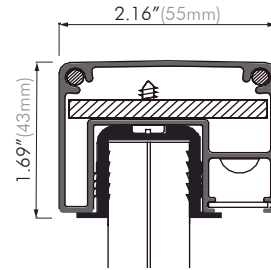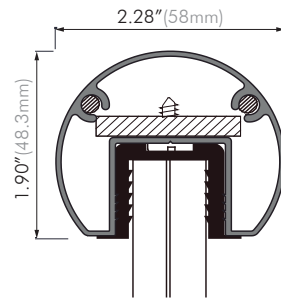
Round
Handrail
KIT: K9

Opciones FRENTE LOSA

2.90"(73.7mm)

5.35"(136mm)
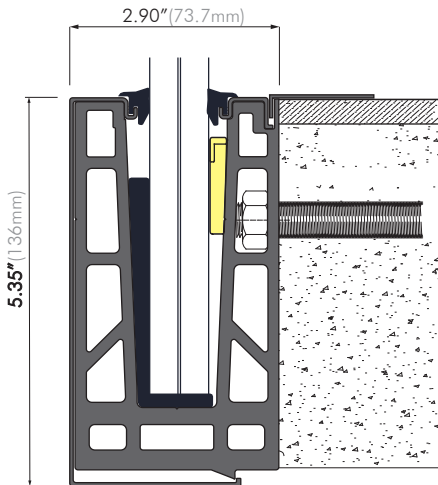
Fascia Mount
max. panel height 43"

Continuous and modular base shoe
KIT: K12

⚠ K12 UP TO
1212lb (550Kg.)
Use proper glazing

2.92"(74.3mm)

5.23"(133mm)

Fascia Mount
max. panel height 43"

Continuous base shoe
KIT: K10

⚠ K10 UO TO
330lb (150Kg.)
Use proper glazing

ALU WIND — Aluminum Extrusions

ACCESSORIES

SKU		DESCRIPTION	SUPPLIER	IMAGE	QTY	Unit	Usage
ANG1	ADDITIONAL ACCESSORY	Stainless steel angle	ALUWIND		1	Piece	1 to hold the handrail end against the wall
SPA1	ADDITIONAL ACCESSORY	Stainless steel handrail bracket	ALUWIND		1	Piece	We recommend spacing the Brackets 39 inches apart
SPR1	ADDITIONAL ACCESSORY	Stainless steel squared wall bracket	ALUWIND		1	Piece	We recommend spacing the Brackets 39 inches apart
ESK9	ADDITIONAL ACCESSORY	K7/K9 aluminum corner joint	ALUWIND		1	Piece	Insert one per joint
ESK1	ADDITIONAL ACCESSORY	K1 / K8 aluminum corner joint	ALUWIND		1	Piece	Insert one per joint
HERR	ADDITIONAL ACCESSORY	Chock spatule	ALUWIND		1	Piece	-
9010/9012/ 9016/9020	ADDITIONAL ACCESSORY	Stainless steel 90° (folded) glass connector for 10mm-21mm tempered glass	ALUWIND		1	Piece	Insert one per glass corner joint
AR10/AR12/ AR16/AR20	ADDITIONAL ACCESSORY	Stainless steel U folded channel for 10 mm-21mm tempered glass	ALUWIND		1	Piece	Insert one per glass linear joint
YM15	ADDITIONAL ACCESSORY	YM15 glass connector (90°)	ALUWIND		1	Piece	Insert one per glass corner joint
YM16	ADDITIONAL ACCESSORY	YM16 glass connector (180°)	ALUWIND		1	Piece	Insert one per glass linear joint
ASP1	ADDITIONAL ACCESSORY	Stainless steel glass connector with handrail bracket	ALUWIND		1	Piece	We recommend spacing the Brackets 39 inches apart
AI01	ADDITIONAL ACCESSORY	Suplemento de alto impacto 3mm	ALUWIND		1	Piece	User-defined
RLED	ADDITIONAL ACCESSORY	LED String 5630 / 600 1,2A/m	-		Strip 1[m]_____1[A] 2[m]_____2[A] 5[m]_____5[A]		All along the handrail/ led housing
TRAN	ADDITIONAL ACCESSORY	ampere per meter 12v power adapter [1-5]Amper	-		1	Piece	User-defined
SCL1	ADDITIONAL ACCESSORY	Silicone weather-proofing sealant DOW CORNING 791			1	Piece	User-defined
GAK6	ADDITIONAL ACCESSORY	GRAMPA DE AMURE	ALUWIND		1	Piece	User-defined
VID	ADDITIONAL ACCESSORY	VIDRIOS CON SENTRYGLAS			Piece		User-defined
INS	ADDITIONAL ACCESSORY	INSTALACION			Piece		User-defined

ACCESSORIES

| SKU		DESCRIPTION	SUPPLIER	IMAGE	QTY	Unit	Usage
TK01	ADDITIONAL ACCESSORY	K1 plastic end cap	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK07	ADDITIONAL ACCESSORY	K7 plastic end cap	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK08	ADDITIONAL ACCESSORY	K8 plastic end cap	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK09	ADDITIONAL ACCESSORY	K9 stainless steel end cap	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK05	ADDITIONAL ACCESSORY	K5 stainless steel end cap	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK04	ADDITIONAL ACCESSORY	K4 stainless steel end cap	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK03	ADDITIONAL ACCESSORY	K1+K3 stainless steel end cap	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK33	ADDITIONAL ACCESSORY	K1+K3 (on both sides) stainless steel end cap	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK6R	ADDITIONAL ACCESSORY	K6 stainless steel end cap with hose fitting	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish
TK6R	ADDITIONAL ACCESSORY	K6 stainless steel end cap with hose elbow	ALUWIND		1	Piece	1 placed at the end of the profile. Used for aesthetic finish

CHEMICAL ANCHOR

ACCESSORIES

SKU		DESCRIPTION	SUPPLIER	IMAGE	Unit	Usage
R010 RE-10 (2142303)	ADDITIONAL ACCESSORY	Re-10 anchoring system (cod.2142303) injectable epoxy mortar for anchoring in concrete	HILTI USA		19.61 fl oz	Inject the anchor before inserting the threaded rod
HDM5 HDM 500 (2005641)	ADDITIONAL ACCESSORY	Manual anchor adhesive dispenser hdm-500 (cod.2005641)	HILTI USA		Piece	User-defined
R100 RE-100 (2123384)	ADDITIONAL ACCESSORY	Re-100 anchoring system (cod.2123384) High-performance injectable epoxy mortar ** Requires HIT-CB500 cartridge holder not included.	HILTI USA		11.16fl oz 16.91 oz	Inject the anchor before inserting the threaded rod
R500 RE-500 (2123404)	ADDITIONAL ACCESSORY	Re-500 anchoring system (cod.2123404) Resina epóxico, alto rendimiento para conexiones barras/anclajes de altas cargas ** Requires HIT-CB500 cartridge holder not included.	HILTI USA		1x Paquete de lámina doble 1x Mezclador	Inject the anchor before inserting the threaded rod
HITC HDM 500 + HIT-CB (3560133)	ADDITIONAL ACCESSORY	Manual dispenser with cartridge holder Hit-cb (COD.3560133) RE-100 RE-500	HILTI USA		1 dispenser 1 cartridge holder	User-defined

SCREW ANCHOR

ACCESSORIES

SKU		DESCRIPTION	SUPPLIER	IMAGE	Unit	Usage
KHEZ KH-EZ (418059)	ADDITIONAL ACCESSORY	Screw anchor kh-ez(cod.418059) 3/8"x4"	HILTI USA		50pc 100pc	User-defined
SIW2 SIW 22T-A 1/2" (405032)	ADDITIONAL ACCESSORY	Impact wrench 22v siw22T-A 1/2" (cod.405032)	HILTI USA		Piece	User-defined
B22V B 22/5.2 (2136396)	ADDITIONAL ACCESSORY	Compact 22v Battery pack (cod.2136396)	HILTI USA		Piece	User-defined
CBAT C 4/36-90 2026282	ADDITIONAL ACCESSORY	Multi-voltage compact charger for all Hilti Li-ion batteries (cod.2026282)	HILTI USA		Piece	User-defined

TOP MOUNT BASE SHOE
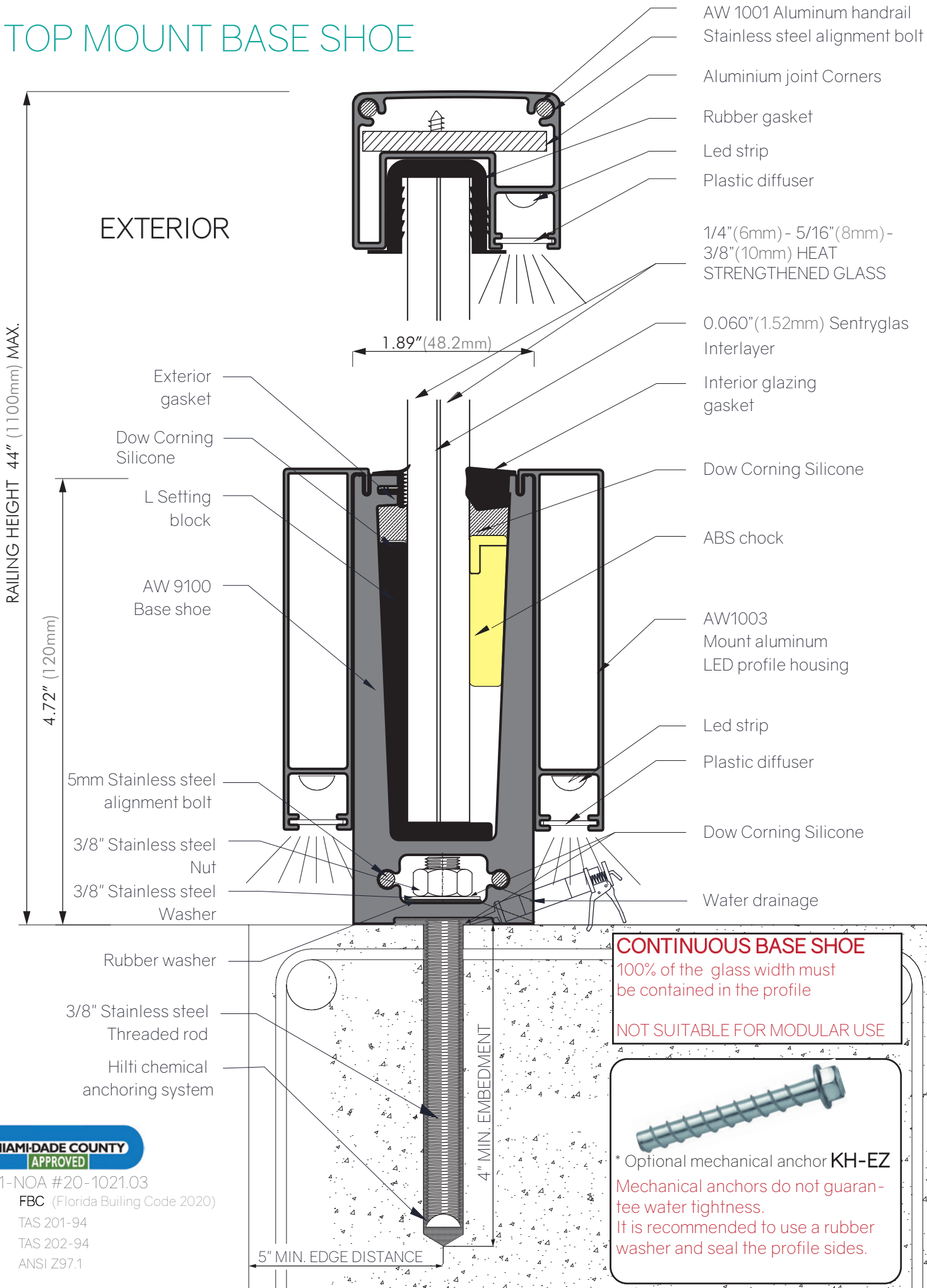
EXTERIOR

AW 1001 Aluminum handrail
Stainless steel alignment bolt

Aluminium joint Corners

Rubber gasket

Led strip

Plastic diffuser

1/4"(6mm) - 5/16"(8mm) - 3/8"(10mm) HEAT STRENGTHENED GLASS

0.060"(1.52mm) Sentryglas Interlayer

Interior glazing gasket

Dow Corning Silicone

ABS chock

AW1003 Mount aluminum LED profile housing

Led strip

Plastic diffuser

Dow Corning Silicone

Water drainage

RAILING HEIGHT 44" (1100mm) MAX.

4.72" (120mm)

1.89"(48.2mm)

Exterior gasket

Dow Corning Silicone

L Setting block

AW 9100 Base shoe

5mm Stainless steel alignment bolt

3/8" Stainless steel Nut

3/8" Stainless steel Washer

Rubber washer

3/8" Stainless steel Threaded rod

Hilti chemical anchoring system

4" MIN. EMBEDMENT

5" MIN. EDGE DISTANCE

CONTINUOUS BASE SHOE
100% of the glass width must be contained in the profile

NOT SUITABLE FOR MODULAR USE

* Optional mechanical anchor **KH-EZ**

Mechanical anchors do not guarantee water tightness.
It is recommended to use a rubber washer and seal the profile sides.
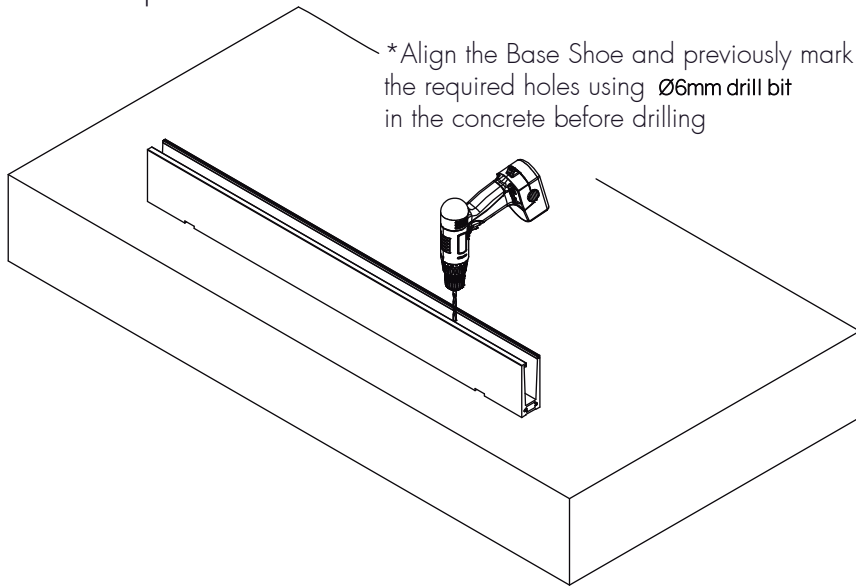
MIAMI-DADE COUNTY APPROVED

K1-NOA #20-1021.03
✓ **FBC** (Florida Builing Code 2020)
✓ TAS 201-94
✓ TAS 202-94
✓ ANSI Z97.1

1- Place the profile and mark the concrete surface

*Align the Base Shoe and previously mark the required holes using Ø6mm drill bit in the concrete before drilling
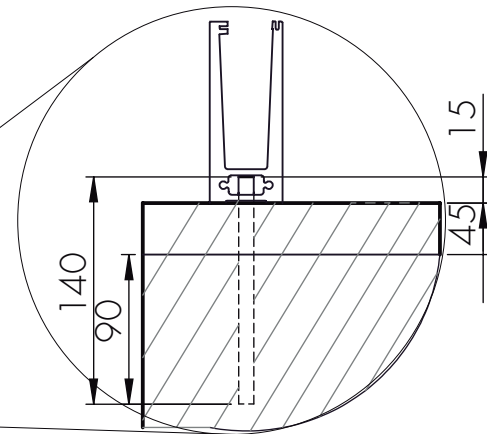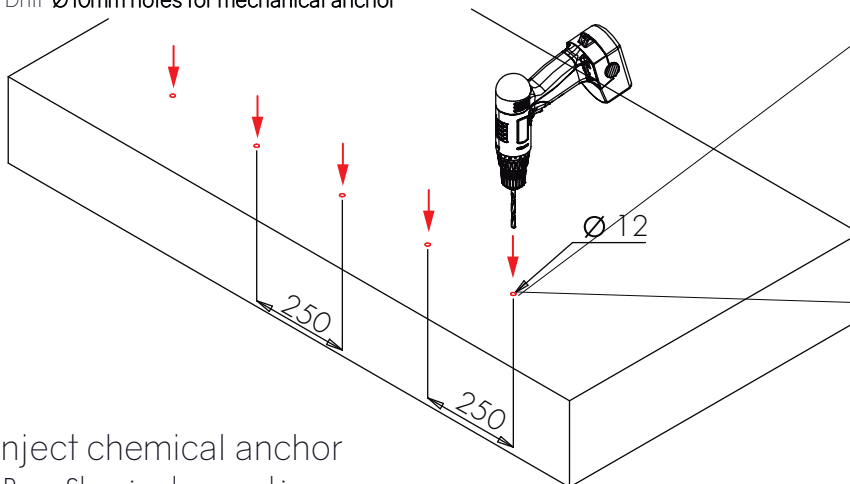
⚠ VERY IMPORTANT!
LEVEL THE SURFACE

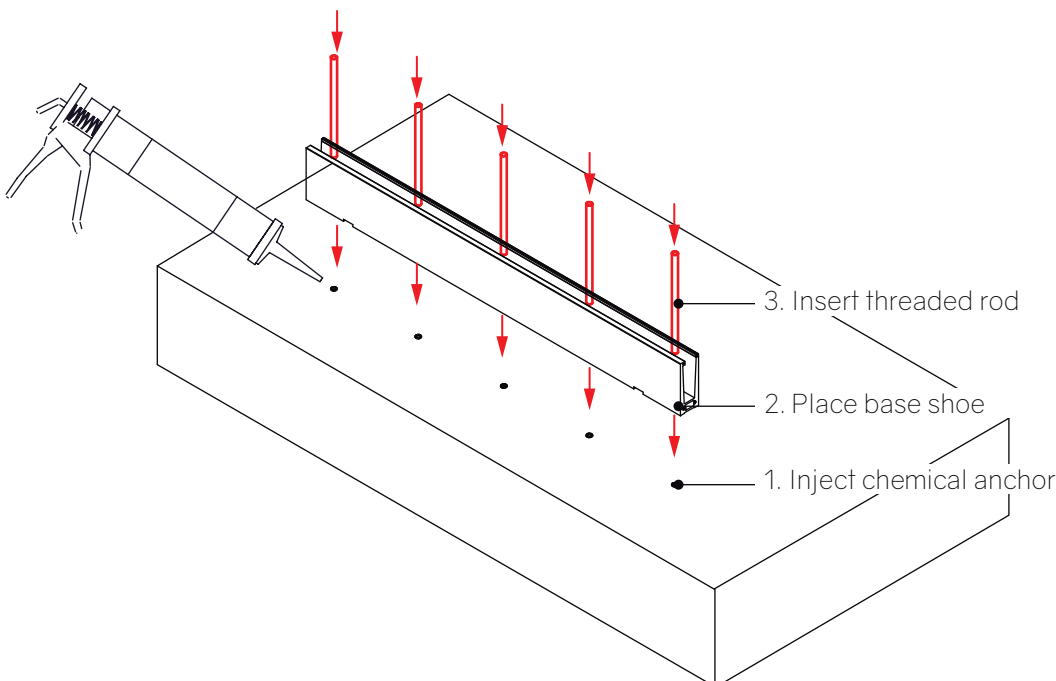CHECK THE PROFILE IS PERFECTLY LEVELLED otherwise the glass won't be perfectly vertical

2- Drill 9cm into concrete slab and clean the dust

Drill Ø12mm holes for threaded rod and chemical anchor
Drill Ø10mm holes for mechanical anchor

Ø 12

250

250

15
45
140
90

3. Inject chemical anchor

Set Base Shoe in place, making sure the Base Shoe holes match the slab holes

WARNING!

Drill bit must be buried minimum 90mm into slab. Take account of the floor binder as well as the profile thickness.

3. Insert threaded rod

2. Place base shoe

1. Inject chemical anchor

⚠ It is MANDATORY to clean the dust from the slab-holes before injecting the chemical anchor/ inserting the mechanichal anchor

⚠ It is VERY IMPORTANT to place the base shoe before inserting the threaded rod for proper alignment
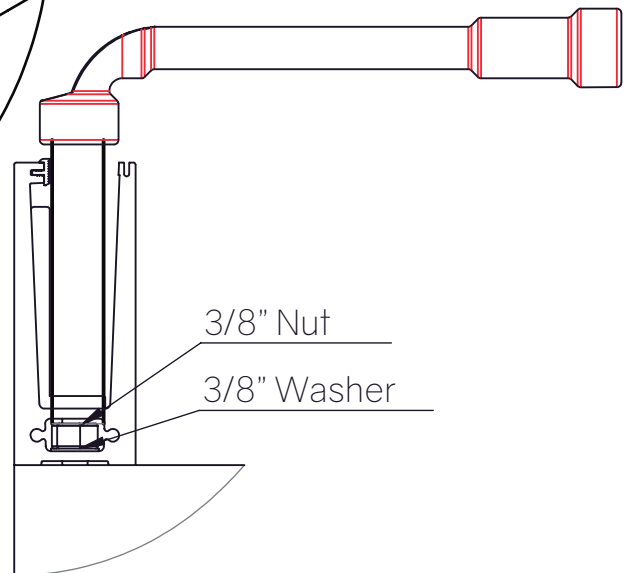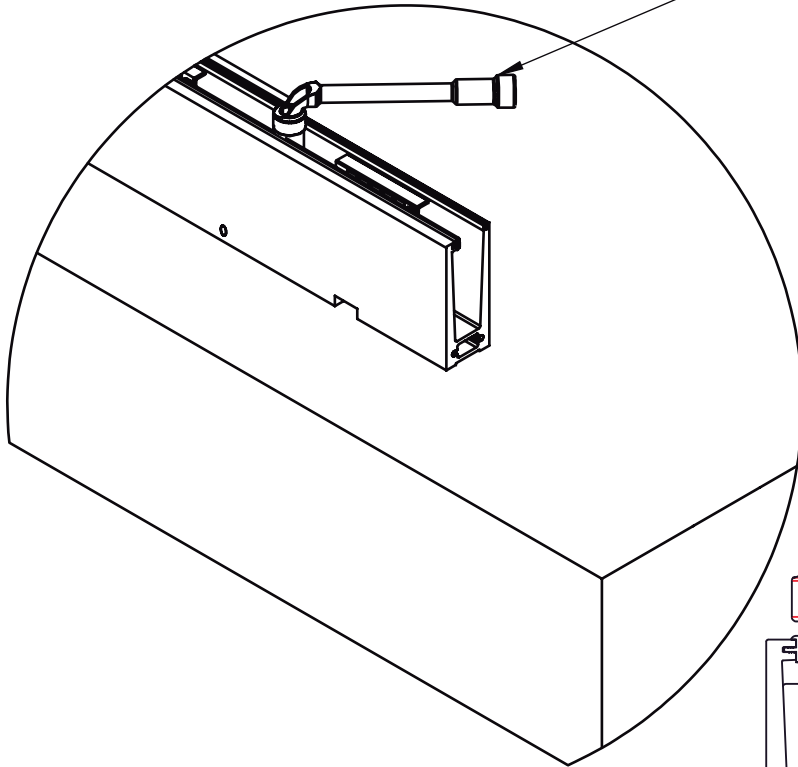
6- Tighten nuts and washers

14mm Socket wrench

Note: Tighten until achieving
6Kn of torque in a dried and clean
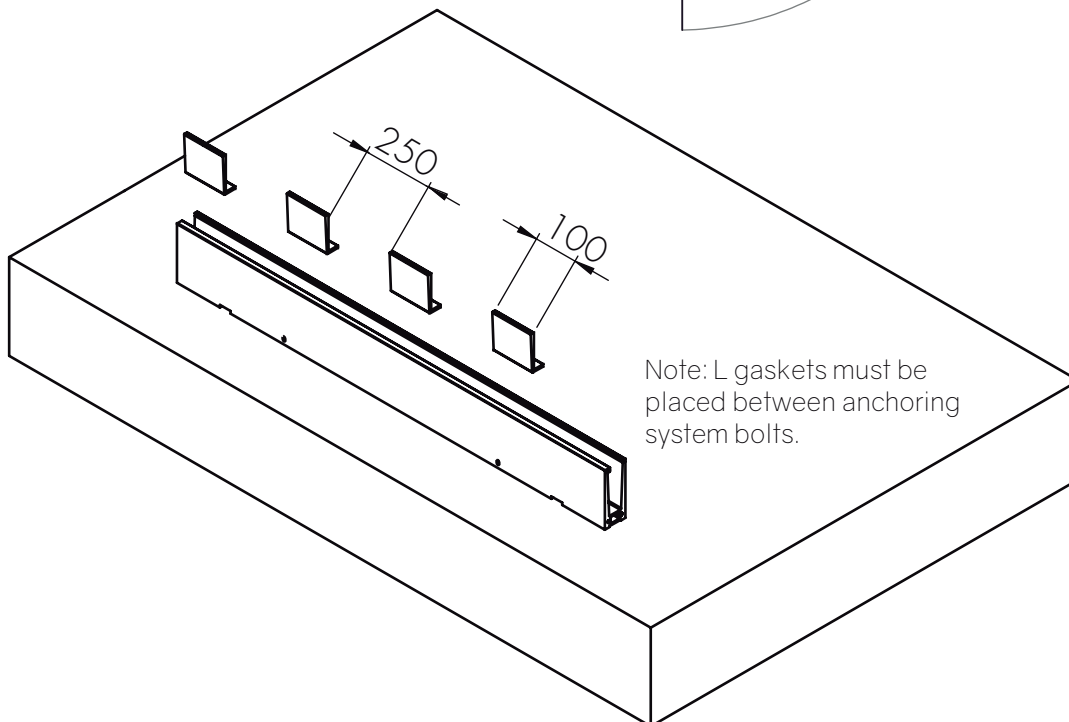condition

⚠ VERY IMPORTANT!

The profile must always be in full contact
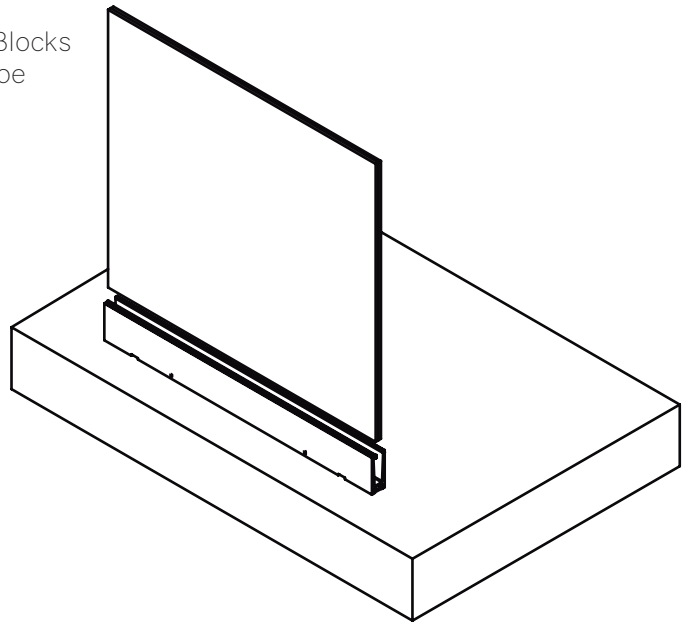with the surface

3/8" Nut

3/8" Washer

5- Place all L setting blocks into the base shoe cavity.

250

100

Note: L gaskets must be
placed between anchoring
system bolts.

ALU WIND
Aluminum Extrusions

6- Glass Panel Installation

Before installing the glass panels the L-Setting Blocks must be adhered onto the bottom of the base shoe

7- Plastic chocks installation

⚠ Each chock must be placed right in front of an L

250mm spacing between chocks
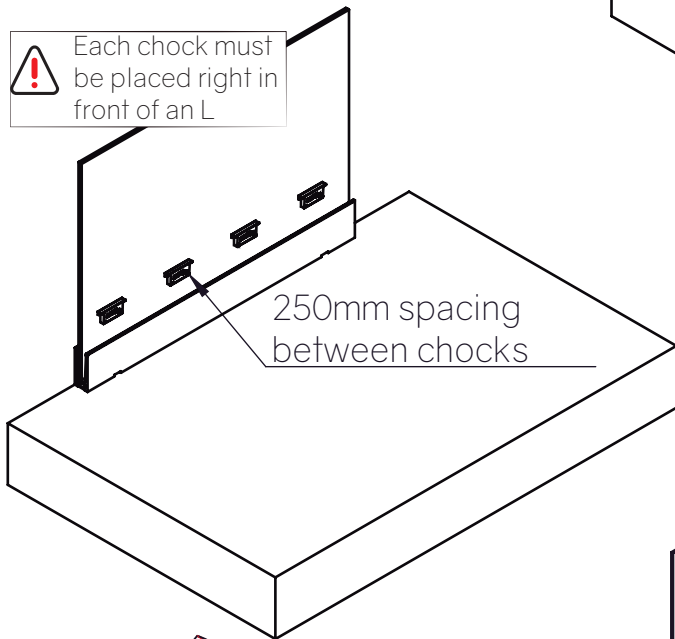
8- Use Installation/Removal Tool (spatule) to lock the glass securely in place

Metal spatule
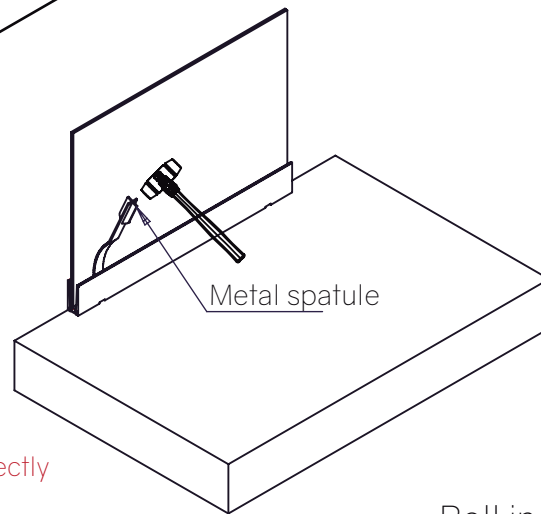
Warning: keep the tool separeted from the glass when installing the chocks
Make sure the glass is plumb and perfectly aligned with adjacent panels

Roll in the Interior Glazing gasket

Push the chock into the profile's cavity

Put the glass above L setting Block

Roll in exterior gasket

90°

ALU WIND — Aluminum Extrusions

K11- GLASS FENCE

Interior glazing gasket (varies)
code 2749 (8+8mm)
code 2753(10+10mm)

Exterior glazing
gasket code 2053

AW D01
Led profile
housing

exterior
rubber gasket
code 2821

Heat strenghtened
glass
8+8/ 10+10

Sentryglas
interlayer
de 0.89mm

7.75" (197mm)

AW D04
Top column

L setting
block

ABS chock

LED

AW D03
Base shoe

Diffuser

Screw M5X20mm

AW D02
Bottom cover

3/8" stainless
steel threaded rod
3/8" stainless steel
nut

Chemical
anchoring
system

3/8" stainless steel
washer

5.39" (137mm)

3.54"
(90mm)

K12- FASCIA MOUNT

1/4"(6mm) - 5/16"(8mm) - 3/8"(10mm)
HEAT STRENGTHENED GLASS

Interior rubber gasket (varies)

AW D07- U Channel

11x50 Angle

Exterior glazing
gasket code 2921

0.060"
(1.52mm)
Sentryglas
Interlayer

Plastic
chock

L setting
block

AW D05
Base shoe

AWD06
cover

5.35" (136mm.)

2.91" (74mm.)

3.54" (90mm.)

Chemical anchoring
system

3/8" stainless
steel threaded rod

3/8" stainless steel
nut

3/8" stainless steel
washer

K12- Fascia Mount

Continuous

500
250
500
250
250
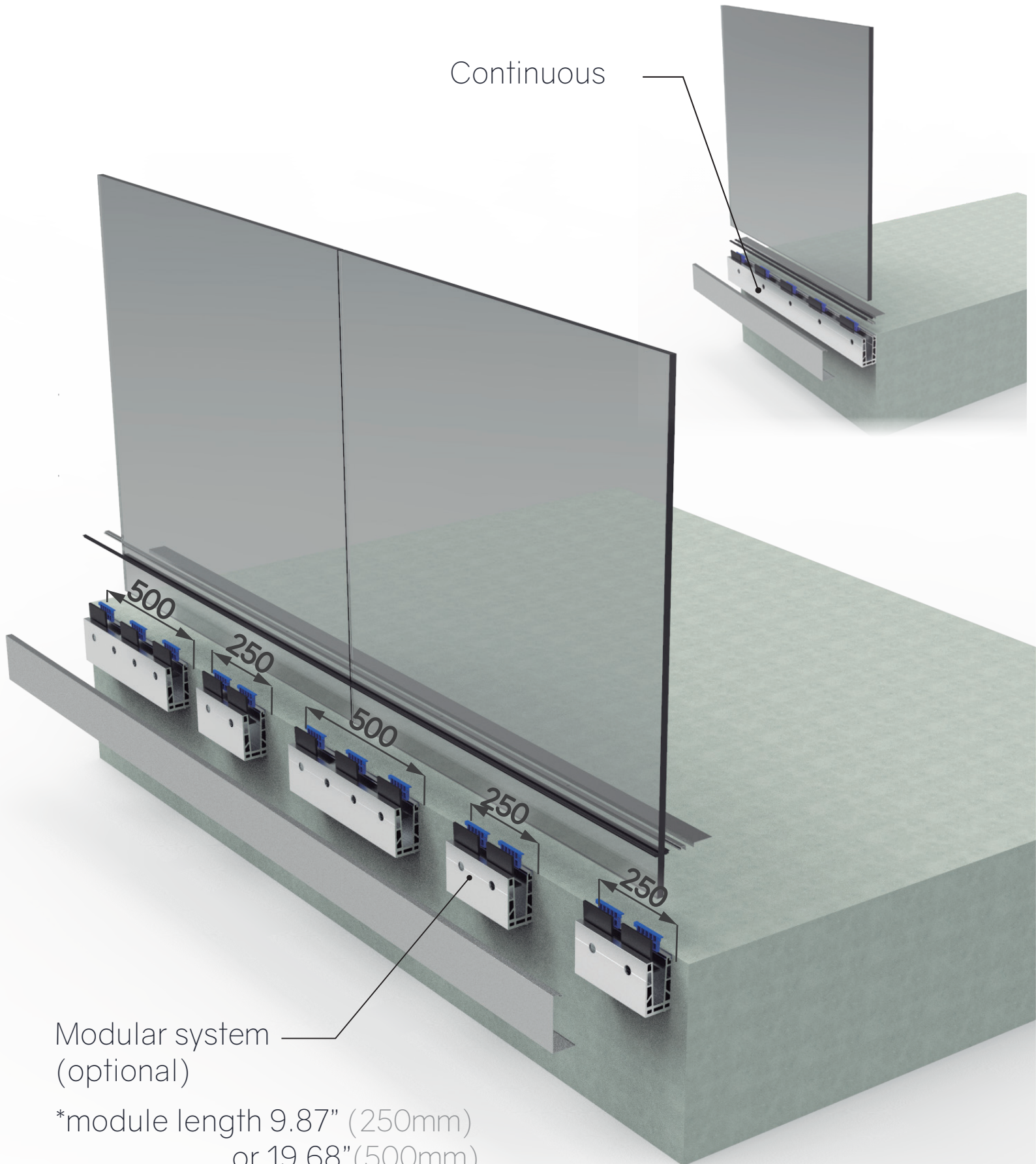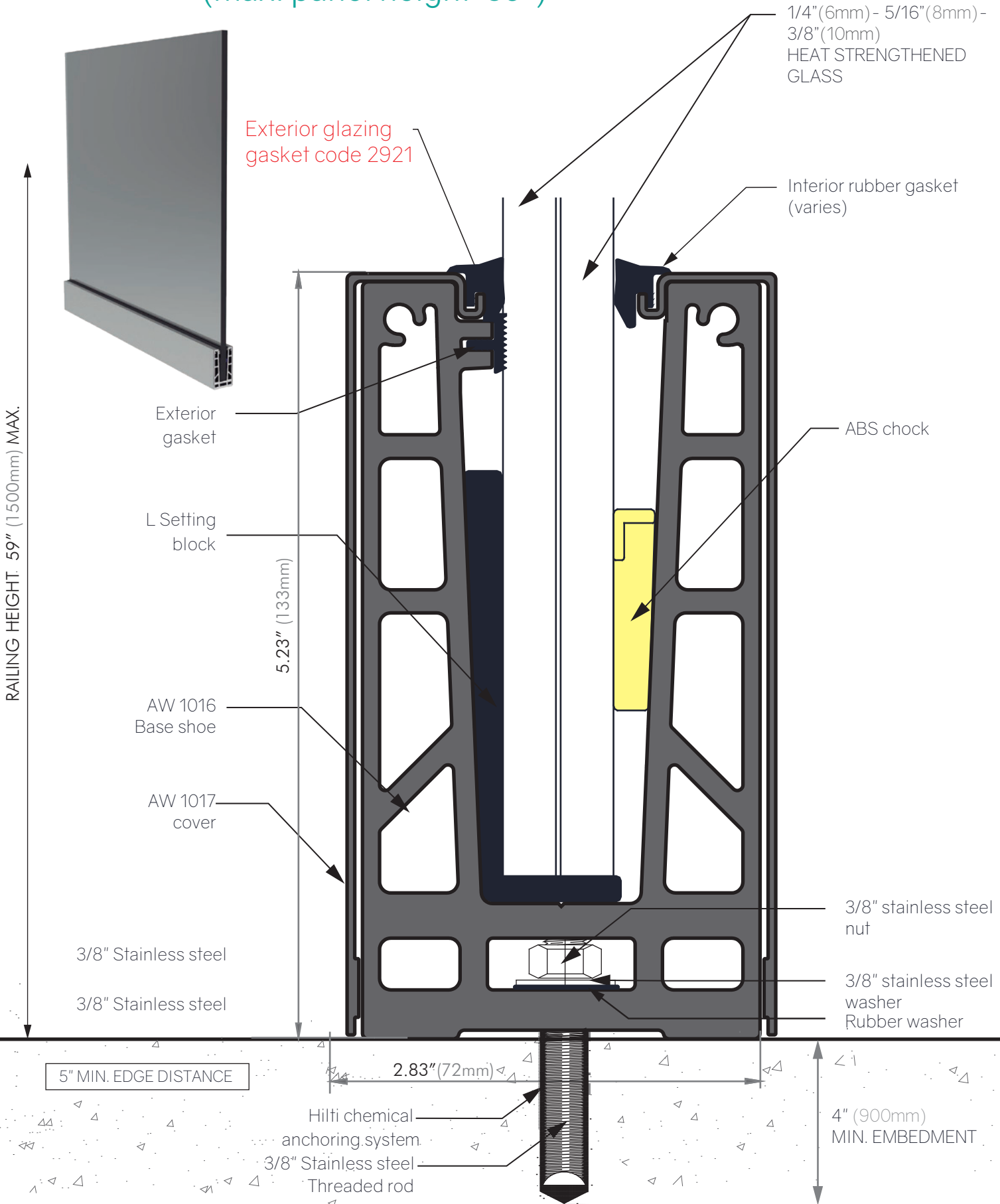
Modular system
(optional)

*module length 9.87" (250mm)
or 19.68"(500mm)
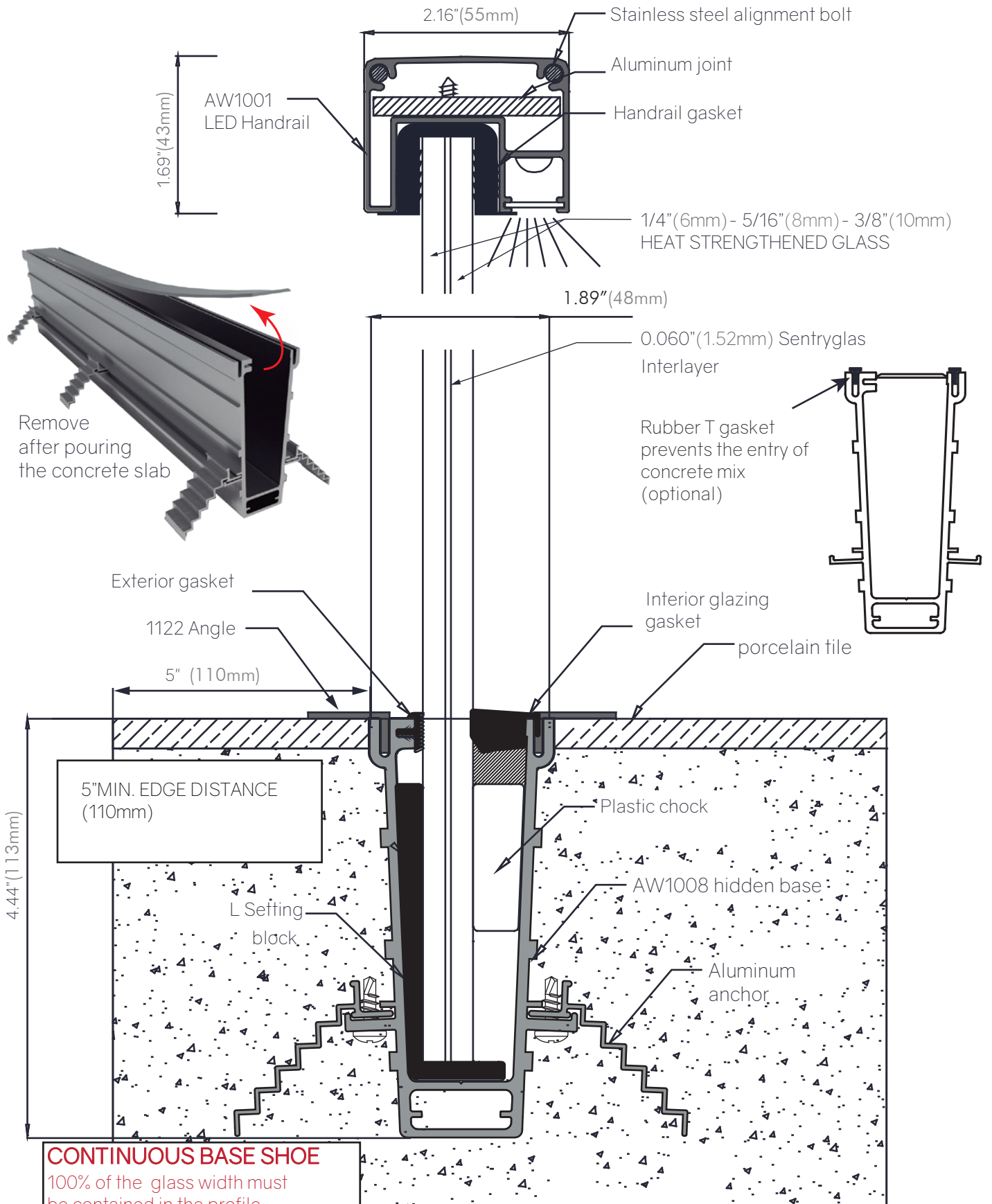
K15- Top Mount base shoe
(max. panel height 59")

1/4"(6mm) - 5/16"(8mm) - 3/8"(10mm) HEAT STRENGTHENED GLASS

Exterior glazing gasket code 2921

Interior rubber gasket (varies)

Exterior gasket

ABS chock

L Setting block

RAILING HEIGHT: 59" (1500mm) MAX.

5.23" (133mm)

AW 1016 Base shoe

AW 1017 cover

3/8" Stainless steel

3/8" Stainless steel

3/8" stainless steel nut

3/8" stainless steel washer
Rubber washer

5" MIN. EDGE DISTANCE

2.83"(72mm)

4" (900mm) MIN. EMBEDMENT

Hilti chemical anchoring system

3/8" Stainless steel Threaded rod

K15- SISTEMA SOBRE LOSA

Continuous

500

250

500

250

250

Modular system
(optional)

*module length 9.87" (250mm)
      or 19.68"(500mm)

HIDDEN BASE CHANNEL

2.16"(55mm)

Stainless steel alignment bolt

Aluminum joint

AW1001
LED Handrail

1.69"(43mm)

Handrail gasket

1/4"(6mm) - 5/16"(8mm) - 3/8"(10mm)
HEAT STRENGTHENED GLASS

1.89"(48mm)

0.060"(1.52mm) Sentryglas
Interlayer

Remove
after pouring
the concrete slab

Rubber T gasket
prevents the entry of
concrete mix
(optional)

Exterior gasket

Interior glazing
gasket

1122 Angle

porcelain tile

5" (110mm)

5"MIN. EDGE DISTANCE
(110mm)

Plastic chock

4.44''(113mm)

AW1008 hidden base

L Setting
block

Aluminum
anchor

CONTINUOUS BASE SHOE
100% of the glass width must
be contained in the profile

NOT SUITABLE FOR MODULAR USE

ALU WIND
Extruded Aluminum

Water drainage

Paste with transparent silicone sealant
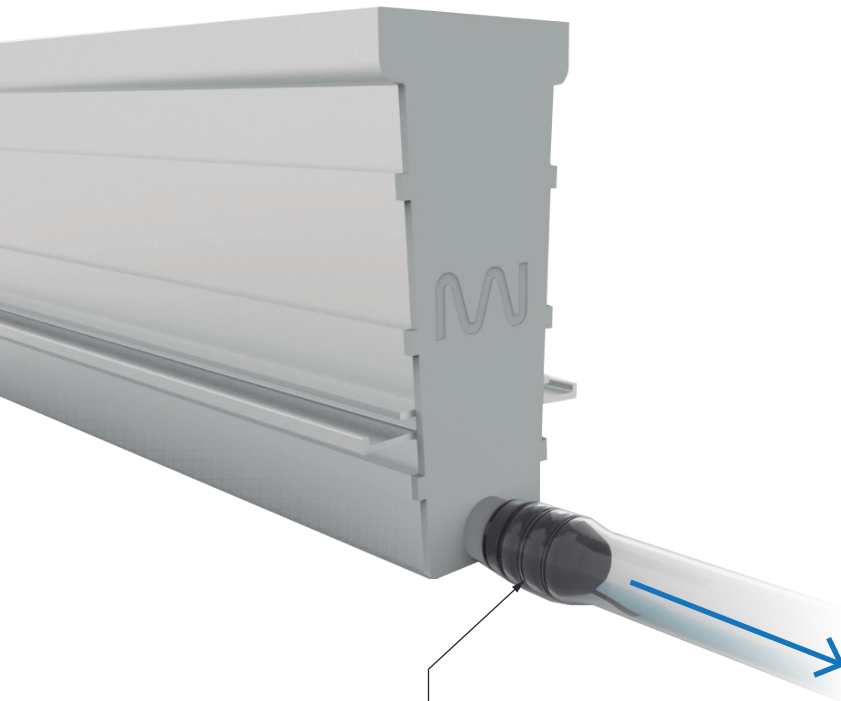
Optional

End cap with hose Elbow

End cap with hose fitting
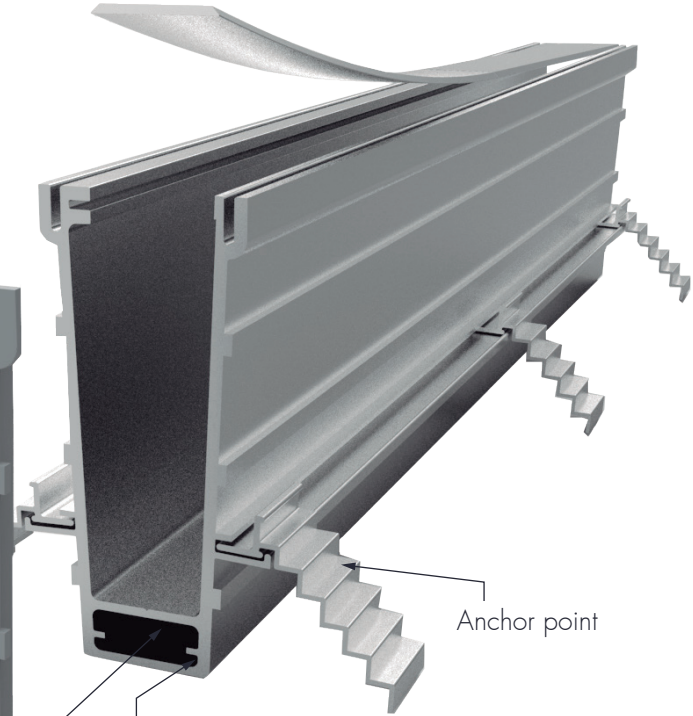
Anchor point

Joint gap
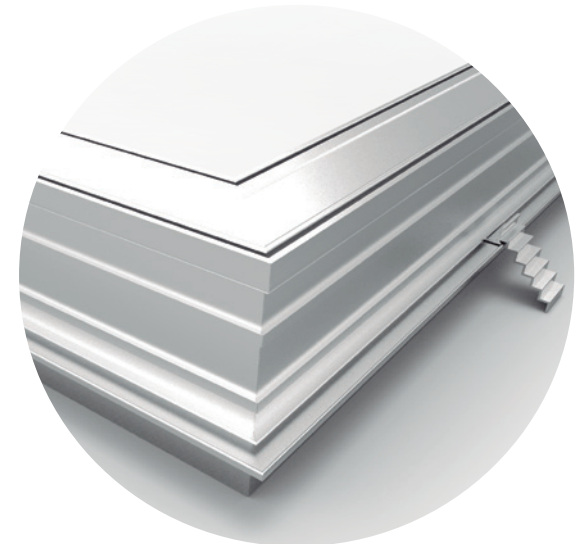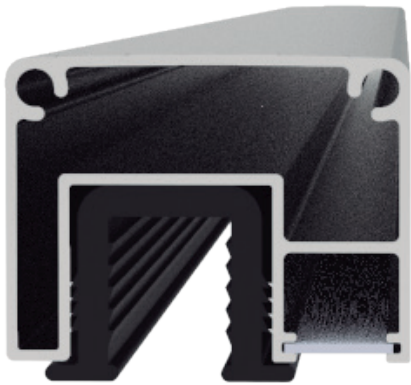
Drain channel
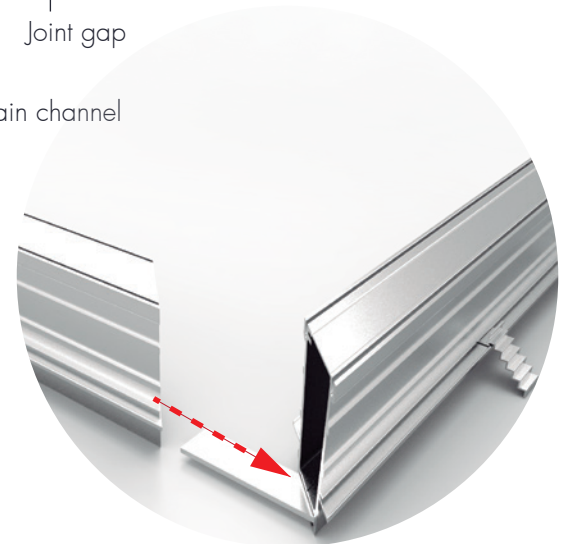
Embedded aluminium anchor

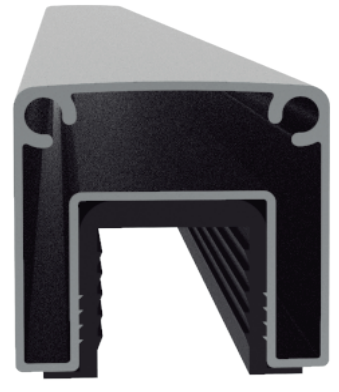Drain connection to ø14mm hose

HANDRAIL systems

LED

KIT: K7

ROUND

KIT: K9

SQUARE

KIT: K8

Handrail installing

*First place the rubber gasket on top of the glass and then press the aluminum profile over it.

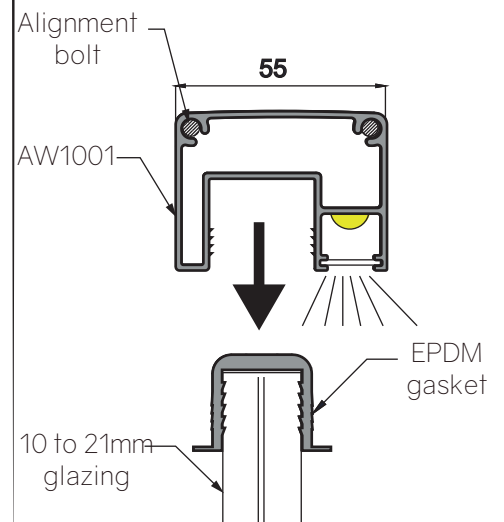**With 8+8 and 10+10 glazing, place the rubber gasket inside the aluminum profile and then press them over the glass.

ALUMINUM HAND RAIL
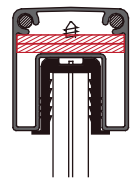(K7/ K8/ K9)

EPDM RUBBER
GASKET

Attention!
A little pressure is needed to push the handrail in its place.

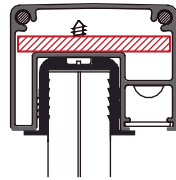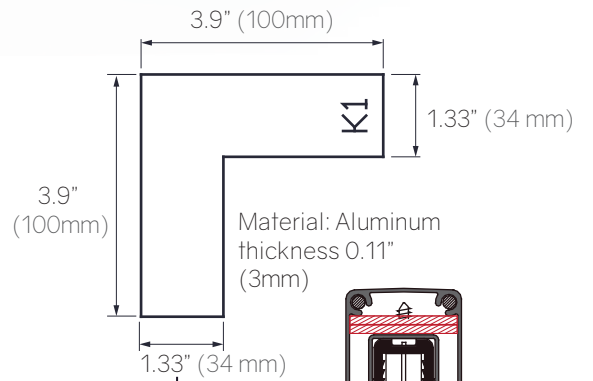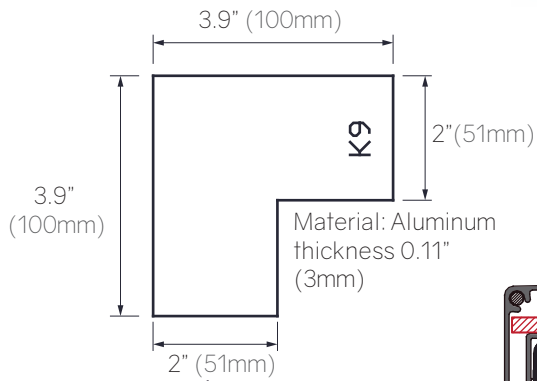Alignment bolt

55

AW1001

EPDM gasket

10 to 21mm glazing

10 mm heat'n strenghtened glass with Sentryglas interlayer 0.89mm
(6+6 / 8+8 / 10+10)

ALU WIND
Aluminum Extrusions

Aluminum L Shape Connector

45° Mitered
Handrail

3.9" (100mm)

K9

2"(51mm)

3.9"
(100mm)

Material: Aluminum
thickness 0.11"
(3mm)

2" (51mm)

3.9" (100mm)

K1

1.33" (34 mm)

3.9"
(100mm)

Material: Aluminum
thickness 0.11"
(3mm)

1.33" (34 mm)

Round Handrail

KIT: K9

LED Handrail

KIT: K7
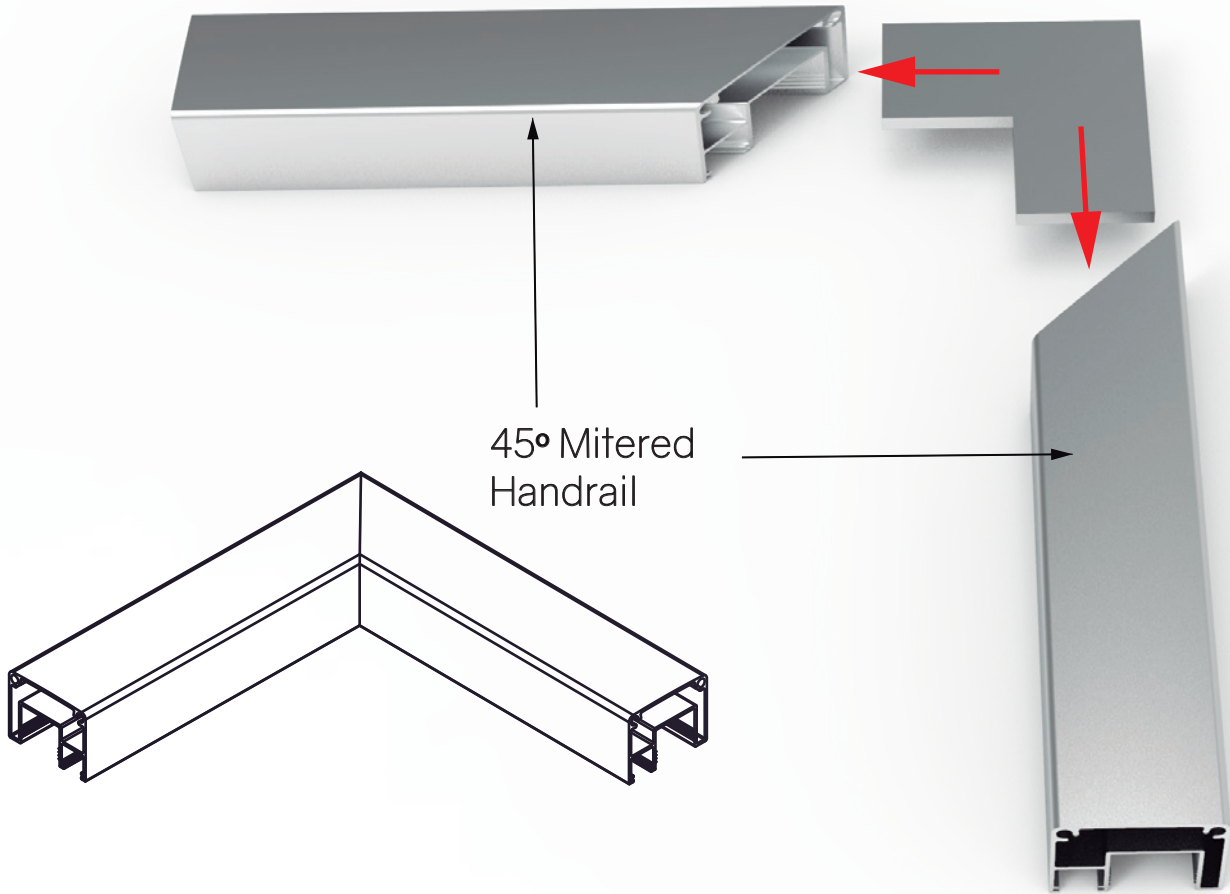
Square Handrail

KIT: K8

IMPERIA

GLASS RAILING