

Building with conscience.





Design Guide



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ATTENTION

The final design of any project is the sole responsibility of the Design Professional, with considerations for compliance with local building and design codes and requirements. Sto Corp. accepts no liability for design, engineering, or workmanship of any project. The information provided herein is in addition to other technical data provided by Sto Corp. (System Bulletin, Specification, Guide Details, etc). For more information, please visit www.stocorp.com

Sto Corp.

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StoVentec® for Masonry Veneer Facades The Original Complete Rainscreen® System

StoVentec for masonry veneer facades is a drained and back-ventilated, fully engineered rainscreen wall system designed for use with thin masonry veneers. The system consists of five principal components: an air and moisture barrier, an adjustable sub-construction, thermal insulation, a lightweight composite carrier board made from recycled glass granulates, and the masonry veneer finish.

All Sto components are covered by a single-source warranty from Sto Corp., are manufactured under an ISO 9001 certified quality system, and are tested as a system to conform with building code requirements.

StoVentec for masonry veneer facades delivers high impact strength and puncture resistance, energy efficiency, and fire protection while affording broad design freedom.



Air and Moisture Barrier

The first component of StoVentec is Sto AirSeal®. It is a fluid applied, vapor permeable Air and Moisture barrier (AMB) designed for use on most substrates, including glass mat gypsum sheathing, wood-based sheathing, concrete, and masonry. Sto AirSeal® protects walls against moisture damage from rain during construction and provides secondary moisture protection while the building is in service. It functions as the primary air barrier component in the wall assembly and comes with multiple transition components for maintaining AMB continuity at joints, seams, wall penetrations, and across dissimilar materials. Sto AirSeal® features a 500% elongation capacity, meets requirements of ASTM C1305 Low Temperature Crack Bridging, and offers building code compliance confirmed by ICC-ESR 1233. Sto VaporSeal® can be used where a vapor impermeable air and moisture barrier is specified.



StoVentro™ Sub-construction

Sub-construction plays a vital role in wall design and construction. In addition to forming the structural link between façade and base wall, it also provides design flexibility. Adjustable StoVentro wall brackets, together with StoVentro T and L-profiles, work to accommodate substrate imperfections and to create correctly sized ventilation cavities, for continuous insulation of up to 7 inches (R-30.1), that allow air circulation within limits defined by NFPA 285 fire propagation testing.

Much more than an engineered system that transfers wind and dead loads to structural framing, StoVentro sub-construction is part of the architect's creative toolkit.



Thermal Insulation

StoVentec uses Owens Corning Thermafiber® Rainbarrier®45 continuous insulation. This ASTM C612 (CAN/ULC S-702, Type I) compliant mineral wool provides exceptional thermal performance, fire resistance, acoustical control and moisture resistance.



StoVentec® Carrier Board A+

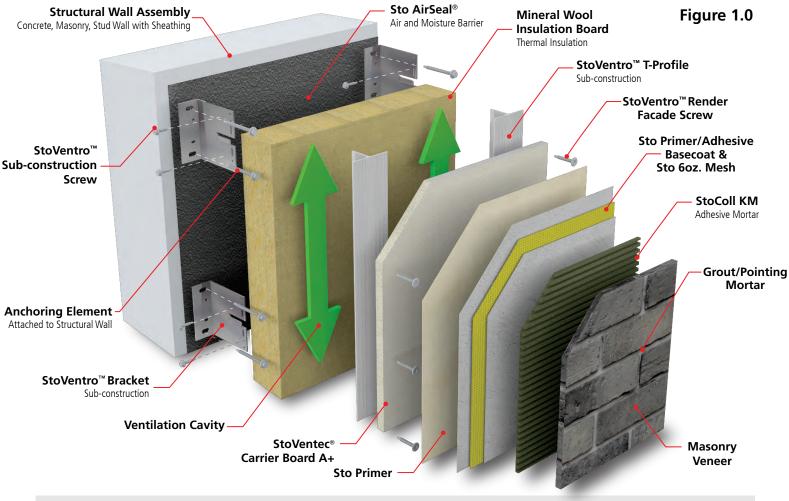
Many of the unique properties of StoVentec are derived from the StoVentec Carrier Board A+, a lightweight composite board made from recycled glass granulates with extraordinary properties. By combining strength and impact resistance with flexibility and light weight, StoVentec Carrier Board A+ opens new possibilities. High impact resistance combined with corrosion resistance takes durability to a new level. StoVentec Carrier Board A+ is the blank canvas on which a broad variety of masonry veneers find expression.



Masonry Veneer

Thin brick in conformance with applicable building code requirements may be used with StoVentec for masonry veneer facades. StoColl KM polymer modified portland cement adhesive mortar, compliant with ANSI 118.4, is used for adhering the masonry veneer units over a reinforced basecoat.





Glossary of Terms

StoGuard®Air & Moisture Barrier – a liquid applied air & moisture barrier available as a vapor-permeable or vapor-impermeable component.

Mineral Wool Insulation Board - Owens Corning Thermafiber® RainBarrier®45 insulation provides thermal insulation, fire resistive characteristics, and acoustical control. (Not provided by Sto Corp.)

StoVentro™ Sub-construction – Stainless-steel or Aluminum wall brackets with aluminum vertical support profiles.

StoVentro™ Bracket – Adjustable stainless-steel or aluminum support for vertical 'L' and 'T' profiles.

StoVentro™Thermal Blocking Element – 6mm (1/4in) thick thermal break accessory that isolates the wall bracket from thermal bridging effects of the primary structure. (Not shown)

StoVentro™ T-Profile – Vertical aluminum profile, attached to the wall brackets, which supports StoVentec® Carrier Board A+.

StoVentro™ Sub-construction Screw – Stainless steel fastener that provides wall bracket to vertical profile attachment.

StoVentro™ Render Facade Screw – Stainless steel fastener that provides attachment of StoVentec® Carrier Board A+ to vertical StoVentro™ T-Profiles.

Ventilation Cavity – The circulating air layer between the Mineral Wool Insulation Board and StoVentec® Carrier Board A+.

StoVentec® Carrier Board A+ – Lightweight composite board made of recycled glass granulate.

Sto Primer/Adhesive Basecoat & Sto Mesh 6oz. – High strength polymer modified portland cement basecoat with glass fiber reinforcing mesh for surface leveling, moisture protection and carrier board reinforcement.

StoColl KM Adhesive Mortar – High strength polymer modified portland cement mortar for adhering masonry veneers.

Sto Primer – Surface primer for uniform absorption.

Masonry Veneer – Offers architects and builders a wide range of design possibilities with thin brick masonry veneers. (Not provided by Sto Corp.)

Grout/Pointing Mortar – polymer modified portland cement-based mortar in compliance with ANSI 118.7 for filling joints between masonry veneer units. (Not provided by Sto Corp.)

StoVentro™ L-Profile – Aluminum support member used at inside and outside corners for structural attachment and to provide protection of carrier board edges in weather exposed portions of the building. (Not shown)

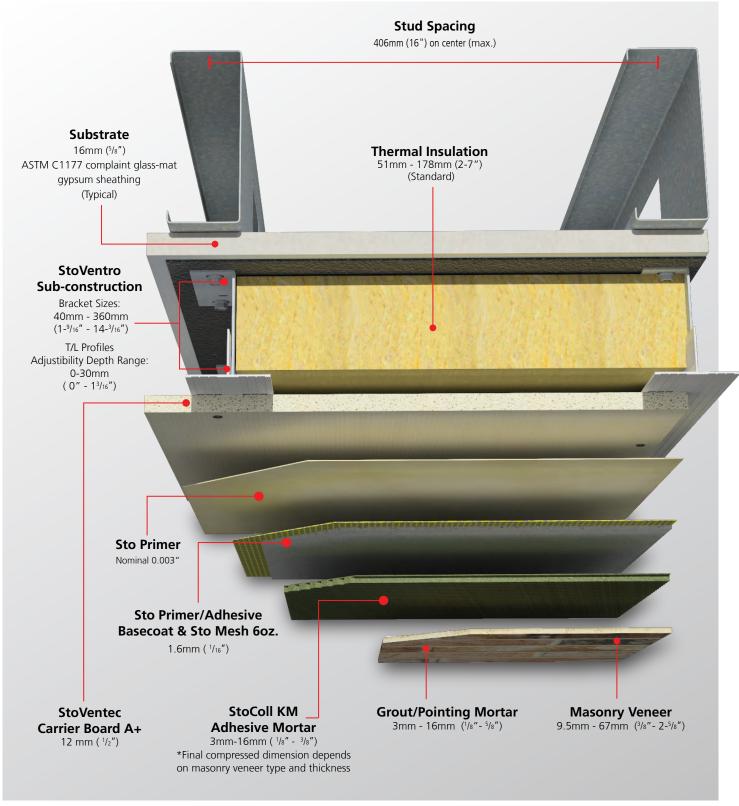
Sto Edge Protection Profile – Sto PVC edge profile with integral glass fiber reinforcing mesh for 12mm StoVentec® Carrier Board A+ carrier board. (Not shown)

Anchoring Element – Engineered, code compliant fastener for attachment of StoVentro™ Bracket to structural wall.



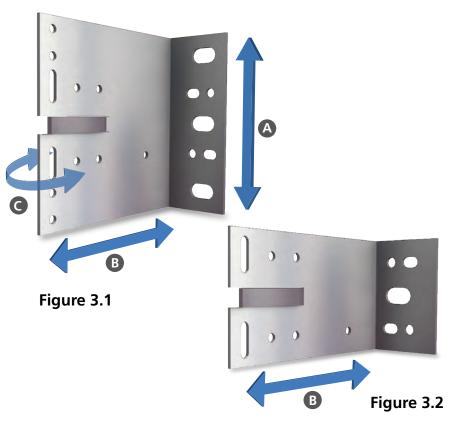
System Buildout Depths

Figure 2.0

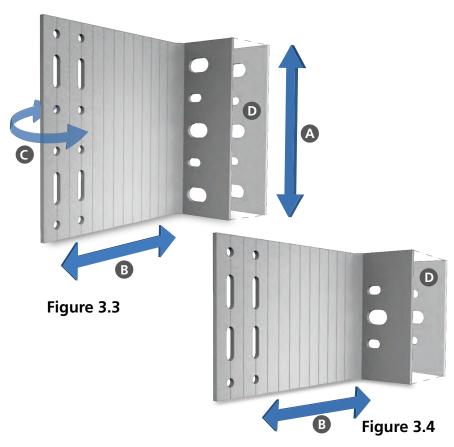


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Stainless Steel Brackets



Aluminum Brackets



StoVentro Bracket SS (Large)

Fixed Point (FP)

Thickness: 2.5mm (½") Height: 130mm (5-½")

Depth: 40mm - 360mm (1-9/16" - 14-3/16") Adjustability (T/L Profile): 30mm (1-3/16")

Consisting of 304 or 316Tl grade stainless steel, StoVentro Large steel brackets provide support for (A) dead loading, (B) wind loading and (C) rotational movement shown in Figure 3.1

StoVentro Bracket SS (Small)

Gliding Point (GP)

Thickness: 2.0mm (1/16") Height: 75mm (2-15/16")

Depth: 40mm - 360mm (1-9/16" - 14-3/16") Adjustability (T/L Profile): 30mm (1-3/16")

Consisting of 304 or 316Tl grade stainless steel, StoVentro Small steel brackets provide support for (B) wind loading only, shown in Figure 3.2

StoVentro Bracket ALUM (Large)

Fixed Point (FP)

Thickness: 3.2mm & 4.2mm (1/8" & 3/16")

Height: 135mm (5-5/16")

Depth: 40mm - 320mm (1-9/16" - 12-5/8") Adjustability (T/L Profile): 30mm (1-3/16")

Consisting of 6063-T66 structural grade aluminum, StoVentro Large aluminum brackets provide support for (A) dead loading, (B) wind loading and (C) rotational movement shown in Figure 3.3. Sto Thermal Blocking Element (D) provides additional protection from thermal bridging.

StoVentro Bracket ALUM (Small)

Gliding Point (GP)

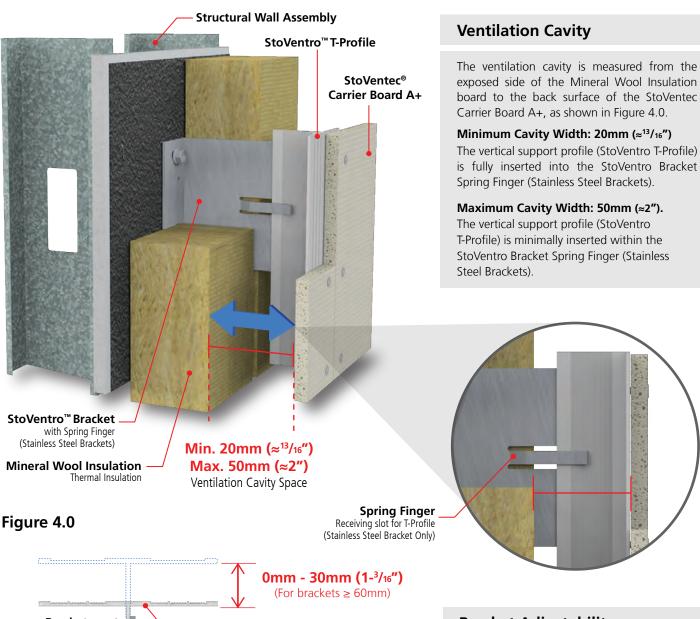
Thickness: 3.2mm & 4.2mm (1/8" & 3/16")

Height: 95.5 mm (3-3/4")

Depth: 40mm - 320mm (1-9/16" - 12-5/8") Adjustability (T/L Profile): 30mm (1-3/16")

Consisting of 6063-T66 structural grade aluminum, StoVentro Small brackets provide support for (A) wind loading only, shown in Figure 3.4. Sto Thermal Blocking Element (D) provides additional protection from thermal bridging.





Omm - 30mm (1-3/16") (For brackets ≥ 60mm) StoVentro™ T-Profile StoVentro™ Sub-Construction Screw StoVentro™ Bracket with Spring Finger (Stainless Steel Brackets) Structural Wall Assembly Metal Stud

Figure 4.1

Bracket Adjustability

Consisting of 6005A-T5 or 6063-T66 grade aluminum, the T/L-Profile is adjustable to the StoVentro brackets a maximum of 30mm (1 -3/16") for brackets ≥ than 60mm (20mm adjustibility for 40mm sized brackets) to accommodate substrate imperfections and proper ventilation cavity depths.

Once fixed in place, the T/L-Profiles provide the support attachment for StoVentec Carrier Board A+ as shown in Figure 4.1.



Table 1.0 - Steel Bracket Size and System Depth as determined by Insulation Requirements

	Insulation ⁴ Size Required		Sto Wall Bracket (Steel) Size Required	- Minimum - Distance from AMB ³ to Front Face of	istance from Distance from MB³ to Front AMB³ to Front Face of Face of	- Maximum - Distance from AMB ³ to Front Face of	- Maximum - Distance from AMB³ to Front Face of		
	Width (in)	Width (mm)	R-Value ¹	RSI-Value ²	(mm)	Base Coat ⁵ (mm)	Base Coat ⁵ (in)	Base Coat ⁵ (mm)	Base Coat ⁵ (in)
	1"	25	4.3	0.74	60	75.3	2 - ¹⁵ / ₁₆ "	105.3	4 -1/8"
	1.5"	38	6.45	1.11	60	75.3	2 - ¹⁵ / ₁₆ "	105.3	4 -1/8"
	2"	50.8	8.6	1.48	80	95.3	3 -3/4"	125.3	5 - ¹⁵ / ₁₆ "
	2.5"	63.5	10.7	1.85	100	115.3	4 - ⁹ / ₁₆ "	145.3	5 -3/4"
	3″	76.2	12.9	2.22	100	115.3	4 - ⁹ / ₁₆ "	145.3	5 -3/4"
	3.5"	88.9	15	2.59	120	135.3	5 - ⁵ / ₁₆ "	165.3	6 - ¹ / ₂ "
Standard	4"	101.6	17.2	2.96	120	135.3	5 - ⁵ / ₁₆ "	165.3	6 -1/2"
Star	4.5"	114.3	19.3	3.33	140	155.3	6 -1/8"	185.3	7 - ⁵ / ₁₆ "
	5"	127	21.5	3.70	160	175.3	6 -7/8"	205.3	8 -1/16"
	5.5"	139.7	23.6	4.07	160	175.3	6 -7/8"	205.3	8 -1/16"
	6"	152.4	25.8	4.44	180	195.3	7 -11/16"	225.3	8 -7/8"
	6.5"	165.1	27.9	4.81	200	215.3	8 -1/2	245.3	9 -11/16"
	7"	177.8	30.1	5.18	200	215.3	8 -1/2"	245.3	9 -11/16"
	7.5"	190.5	32.2	5.55	220	235.3	9 - ¹ / ₄ "	265.3	10 - ⁷ / ₁₆ "
Custom	8"	203.2	34.4	5.92	220	235.3	9 -1/4"	265.3	10 - ⁷ / ₁₆ "
Cus	8.5"	215.9	36.5	6.29	240	255.3	10 -1/16"	285.3	11 -1/4"
٦	9″	228.6	38.7	6.66	260	275.3	10 - ¹³ / ₁₆ "	305.3	12"
quired	9.5"	241.3	40.8	7.03	260	275.3	10 - ¹³ / ₁₆ "	305.3	12"
s Re	10"	254	43	7.40	280	295.3	11 - ⁵ / ₈ "	325.3	12 -13/16"
ation	10.5"	266.7	45.1	7.77	300	315.3	12 - ⁷ / ₁₆ "	345.3	13 -5/8"
ider	11"	279.4	47.3	8.14	300	315.3	12 -7/16"	345.3	13 -5/8"
Cons	11.5"	292.1	49.4	8.51	320	335.3	13 -3/16"	365.3	14 -3/8"
Special Design Considerations Re	12"	304.8	51.6	8.88	320	335.3	13 -3/26"	365.3	14 -3/8"
l De	12.5"	317.5	53.7	9.25	340	355.3	14"	385.3	15 - ³ / ₁₆ "
oecia	13"	330.2	55.9	9.62	360	375.3	14 -3/4"	405.3	15 - ¹⁵ / ₁₆ "
S	13.5"	342.9	58	9.99	360	375.3	14 -3/4"	405.3	15 - ¹⁵ / ₁₆ "

 $^{^{1}}$ R = 4.3 per 1 inch

 $^{^{2}}$ RSI = 0.74 per 25mm

³ AMB= Air and Moisture Barrier Layer

⁴ Owens Corning Thermafiber®RainBarrier®45

 $^{^{\}rm 5}$ Add Masonry Veneer and adhesive mortar thickness to calculate full system thickness.



Table 1.0 - Aluminum Bracket Size & System Depth as determined by Insulation Requirements ⁵

		Insula Size Re			Sto Wall Bracket (Steel) Size Required	- Minimum - Distance from AMB ³ to Front Face of	- Minimum - Distance from AMB ³ to Front Face of	- Maximum - Distance from AMB ³ to Front Face of	- Maximum - Distance from AMB³ to Front Face of
	Width (in)	Width (mm)	R-Value ¹	RSI-Value ²	(mm)	Base Coat ^{5,6} (mm)	Base Coat ^{5,6} (in)	Base Coat ^{5,6} (mm)	Base Coat ^{5,6} (in)
	0	0	0	0	40	55.3	2 - ³ / ₁₆ "	85.3	3 -3/8"
	1"	25	4.3	0.74	60	75.3	2 -15/16"	105.3	4 -1/8"
	1.5"	38	6.45	1.11	60	75.3	2 -15/16"	105.3	4 -1/8"
	2"	50.8	8.6	1.48	80	95.3	3 -3/4"	125.3	4 -15/26"
	2.5"	63.5	10.7	1.85	100	115.3	4 - ⁹ / ₁₆ "	145.3	5 -3/4"
	3"	76.2	12.9	2.22	100	115.3	4 - ⁹ / ₁₆ "	145.3	5 -3/4"
Standard	3.5"	88.9	15	2.59	120	135.3	5 - ⁵ / ₁₆ "	165.3	6 - ¹ / ₂ "
Star	4"	101.6	17.2	2.96	120	135.3	5 - ⁵ / ₁₆ "	165.3	6 - ¹ / ₂ "
	4.5"	114.3	19.3	3.33	140	155.3	6 -1/8"	185.3	7 - ⁵ / ₁₆ "
	5"	127	21.5	3.70	160	175.3	6 -7/8"	205.3	8 - ¹ / ₁₆ "
	5.5"	139.7	23.6	4.07	160	175.3	6 -7/8"	205.3	8 - ¹ / ₁₆ "
	6"	152.4	25.8	4.44	180	195.3	7 -11/16"	225.3	8 -7/8"
	6.5"	165.1	27.9	4.81	200	215.3	8 -1/2	245.3	9 -11/16"
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erati	10.5"	266.7	45.1	7.77	300	315.3	12 - ⁷ / ₁₆ "	345.3	13 -5/8"
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Special Design Considerations Requ	12"	304.8	51.6	8.88	320	335.3	13 -3/16"	365.3	14 -3/8"
cial [N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Spe	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

 $^{^{1}}$ R = 4.3 per 1 inch

 $^{^{2}}$ RSI = 0.74 per 25mm

 $^{^{3}\,\}text{AMB}{=}\,\text{Air}$ and Moisture Barrier Layer

⁵ Add 6mm to system depth when using Sto Thermal Blocking Elements

⁶ Add Masonry Veneer and adhesive mortar thickness to calculate full system thickness.



Table 1.1 - System Information

Feature	Description	Value
Application	Approved for vertical walls only. (Up to 4-stories or 50ft (15.2m) in height, whichever is less.	Above grade only, exterior and interior. Commercial, Residential and Institutional construction.
Warranty	Limited Warranty	10 Year
System Component	Component 1 - Air and Moisture Barrier (AMB)	Sto AirSeal®. Fluid applied, vapor permeable AMB
System Component	Component 2 - Sub-Construction	StoVentro™
System Component	Component 3 - Insulation	Owens Corning Thermafiber® RainBarrier®45
System Component	Component 4 - Carrier Board	StoVentec® Carrier Board A+ (primed with Sto Primer)
System Component	Component 5 - Masonry Veneer	Masonry Veneer (thin brick), in compliance with ASTM C1088, installed with StoColl KM adhesive mortar over Sto Reinforced Base Coat; grouted/pointed with portland-cement grout in compliance with ANSI 118.7.
System Weight	Weight range of Sto Base coat and Sto Mesh, StoVentec Carrier Board A+, StoVentro Sub-construction, Thermal Insulation and StoColl KM. (Does not include masonry veneer)	≈20.86 to ≈31.16 kg/m² (4-6 lb.ft²) Variable based on cavity depth and cladding
System Weight	Weight of StoVentec Carrier Board A+ without Adhered Masonry Veneer	6 kg/m² (1.23 lb./ft²)
System Weight	Weight of StoVentro Sub-construction	≈2.00 kg/m² (0.41 lb./ft²) Variable based on cavity depth
System Weight	Weight of Thermal Insulation (O.C. Thermafiber RainBarrier 45)	0.75 - 2.63 lb/ft² (3.66 - 12.84 kg/m²) at 2"-7" (51 - 178mm) thickness
Substrates	Allowable wall substrates	Steel or wood frame with glass mat gypsum sheathing in compliance with ASTM C1177, code compliant OSB or plywood sheathing, concrete or core-filled concrete masonry, existing structurally sound, uncoated brick or other masonry wall construction. For others, contact Sto Corp.
Substrates	Horizontal spacing (stud spacing) of vertically oriented StoVentro T-profiles mounted in StoVentro brackets	406mm (16") on center
Substrates	Vertical spacing of StoVentro brackets	Varies based on Wind Loads. See StoVentec load tables.
Ventilation	Ventilation is required at top and bottom of masonry veneer panels	Minimum 10mm (³ / ₈ ") gap
Ventilation Cavity	Thickness of unobstructed air cavity between face of wall mounted insulation and rear surface of StoVentec Carrier Board A+	20mm - 50mm (¹³ / ₁₆ " - 2")
Deflection Limit	Recommended allowable deflection limit	L/400
Structural	Structural Wall Assembly level tolerance	6mm in 3.0m (¹³ / ₁₆ " in 10')
System Layout	Gap between StoVentec Carrier Board A+ outside edge and all other physical building elements (if ventilation profile IS NOT used)	< 5mm - 20mm (³ / ₈ " - ¹³ / ₁₆ ")
System Layout	Gap between StoVentec Carrier Board A+ outside edge and all other physical building elements (if ventilation profile IS used)	25mm (1")
System Layout	Clearance of finished veneer surface above ground level	150mm (5- ⁷ / ₈ ") (minimum)
System Layout	StoVentec Carrier Board A+ installation	Carrier boards butt end shall be centered horizontally on the mounting surface of the 90 mm wide vertically oriented T-profiles. See StoVentec Carrier Board A+ Product Bulletin



Table 1.1 - System Information (cont'd)

Feature	Description	Value
System Layout	Aluminum L-Profile Stops	Use of aluminum L-Profile Stops are REQUIRED at all outside exposed edges of StoVentec Carrier Board A+ (i.e. All exposed perimeter edges)
System Layout	Sto Edge Protection Profiles	Use of Sto Edge Protection profiles on non-weather exposed joints in lieu of aluminum L-Profile Stop.
System Layout	StoVentec Carrier Board A+ corners	Use of Sto Mesh Corner Bead required on all outside corners, jambs, and returns of masonry veneer.
System Layout	StoVentec Carrier Board A+ connections to other structures/elements	Use of backer rod and sealant (by others) required at interfaces with other structures and elements.
System Layout	StoVentec Carrier Board A+ orientation	Install carrier boards horizontally in a running bond pattern.
System Layout	Quantity of fixed point (FP) connections to T/L profile	1 maximum
System Layout	Quantity of sliding point (GP) connections to T/L profile	At least one sliding point is required. Actual quantity is defined by project-specific engineering calculations.
Joint Requirements ¹	Max. seamless distance between expansion joints in the field of the walls with length to width ratio not in excess of 2:1	Horizontal joints: 11.5' (3505mm) Vertical joints: 19.8' (6000mm)
		At existing movement joints in back-up wall construction
		At through wall joints in back-up wall construction
Joint Requirements ¹	Joints are required in the system as follows	At dissimilar back-up wall construction (e.g., frame wall to masonry wall)
·	,	At floor line deflection joints in steel frame construction
		At floor lines in multi-level wood-frame construction
		• Within areas of not greater than 144ft² (13.4m²) with length or height not more than 18ft (5.5m) for Thin Brick, with length/width ratio not in excess of 2.5:1.
Joint Requirements ¹	At junctions or abutments to dissimilar building components	Windows, doors, alternative façade materials, pipe, scupper and similar through wall penetrations.
Fire Break	Required (Horizontal)	Refer to StoVentec® Details for material and configuration.
Flashing	Recommended	Refer to StoVentec® Details for material and configuration.

 $^{^{\}mbox{\scriptsize 1}}$ Size joints in accordance with anticipated movement



Table 1.2 - Component Information

Feature	Description	Value
AMB	StoGuard® Air and Moisture Barrier (AMB), Sto AirSeal® or StoGuard® VaporSeal®	Vapor permeable or impermeable per project specific requirement, as manufactured by Sto Corp.
AMB	Thickness	30 DFT (50 wet mils) : Sto AirSeal® 40 DFT (66 wet mils) where specified: Sto AirSeal® 40 DFT (90 wet mils) where specified: StoGuard® VaporSeal®
AMB	Color	Charcoal or Black: Sto AirSeal® Grey/Blue: StoGuard® VaporSeal®
	StoVentro Stainless Steel	Brackets
Sub-Construction	Bracket material	Stainless Steel: 304 or 316TI
Sub-Construction	Bracket: Small StoVentro Bracket (GP) W x H x T1 Used for wind loading	50mm x 75mm x 2.0mm x variable depth (2" x 2- ¹⁵ / ₁₆ " x ¹ / ₁₆ ")
Sub-Construction	Bracket: Large StoVentro Bracket (FP) W x H x T1 Used for dead/fixed point loading and wind loading	50mm x 130mm x 2.5mm x variable depth (2" x 5-1/8" x 1/8")
Sub-Construction	Depth Range	40mm - 360mm (1- ⁹ / ₁₆ " - 14- ³ / ₁₆ ")
Sub-Construction	Bracket: Adjustability Depth Range	0mm - 30mm (0" - 1- ³ / ₁₆ ")
Sub-Construction	Protrusion of top of bracket above face of insulation	≈ 20mm (¹³ / ₁₆ ")
Sub-Construction	Bracket weight	Variable by size
	StoVentro Aluminum	Brackets
Sub-Construction	Bracket material	Aluminum: 6063-T66
Sub-Construction	Bracket: Small StoVentro Bracket (GP) W x H x T1 Used for wind loading	Bracket Sizes: 40 mm- 180 mm sizes 50 mm x 95.5 mm x 3.2 mm x variable depth $(2" \times 3^{-3}/_4" \times ^1/_8")$ Bracket Sizes: 200 mm- 320 mm sizes 50 mm x 95.5 mm x 4.2 mm x variable depth $(2" \times 3^{-3}/_4" \times ^3/_{16}")$
Sub-Construction	Bracket: Large StoVentro Bracket (FP) W x H x T1 Used for dead/fixed point loading and wind loading	Bracket Sizes: 40 mm- 180 mm sizes 50 mm x 135 mm x 3.2 mm x variable depth $(2" \times 5-5/_{16}" \times 1/_8")*40$ mm- 180 mm sizes Bracket Sizes: 200 mm- 320 mm sizes 50 mm x 135 mm x 4.2 mm x variable depth $(2" \times 5-5/_{16}" \times 3/_{16}")*200$ mm- 320 mm sizes
Sub-Construction	Depth Range	40mm - 320mm (3- ¹ / ₈ " - 12- ⁵ / ₈ ")
Sub-Construction	Bracket: Adjustability Depth Range	0mm - 30mm (0" - 1- ³ / ₁₆ ")
Sub-Construction	Protrusion of top of bracket above face of insulation	≈ 20mm (¹³ / ₁₆ ")
Sub-Construction	Bracket weight	Variable by size



Table 1.2 - Component Information (cont'd)

Feature	Description	Value
Sub-Construction	Material (StoVentro L & T Profile)	Aluminum: 6005A-T5 or 6063-T66
Sub-Construction	Size: StoVentro T-profile (3m length)	90mm x 53mm x 2.7mm (3- ⁹ / ₁₆ " x 2- ¹ / ₁₆ " x ¹ / ₈ ")
Sub-Construction	Weight/ft: StoVentro T-profile (approximate)	2.64 kg/m (0.54 lb./ft)
Sub-Construction	Size: StoVentro L-profile (3m length)	50mm x 40mm x 2.7mm (2" x 1-9/ ₁₆ " x ¹ / ₈ ")
Sub-Construction	Weight/ft: StoVentro L-profile (approximate)	1.61 kg/m (0.33 lb./ft)
Sub-Construction	Fastener: Bracket to StoVentro T/L profile attachment	Hex Head (Torx), Self drilling screw, 5.5mm Dia. x 22mm L, with over torque feature, 304 SS. ($^3/_{16}$ " x $^7/_{8}$ ")
Sub-Construction	Fastener to Aluminum: StoVentec Carrier Board A+ to StoVentro T/L profile attachment	Flat Head, Self drilling façade screw, 5.5mm Dia. x 24mm L (³ / ₁₆ " x ¹⁵ / ₁₆ ") for attachment to aluminum substrate
Sub-Construction	Fastener to Carbon Steel substrates: StoVentec Carrier Board A+ to carbon steel stud	Flat Head, Self drilling façade screw, 6.0mm Dia. x 28 mm L $(^{1}/_{4}"$ x $1^{-1}/_{8}"$) 304 SS, for attachment to carbon steel substrates
Sub-Construction	Fastener to Wood Substrates: StoVentec Carrier Board A+ to StoVentro T/L profile attachment	Flat Head, Self drilling screw, 5.0 mm Dia. x 42 mm L ($^3/_{16}$ " x 1- $^5/_{8}$ ") 304 SS, for attachment to wood substrates
Sub-Construction	Bracket to substrate attachment fastener (anchoring fastener). Calculations performed by qualified licensed engineer	Project specific based on wind load, and substrate materials, defined by structural calculations, material: 304 stainless steel
Sub-Construction	Vertical gap between adjacent T/L profiles mounted in an end-to-end configuration	10 - 15mm (³ / ₈ " - ⁵ / ₈ ")
Sub-Construction	Minimum fastening distance from top or bottom edge of T/L profile	≥ 10 mm ($^{3}/_{8}$ ")
Insulation	Type: Mineral Wool Board	ASTM C612 (CAN/ULC S-702, Type I) compliant, non-combustible Mineral Fiber Block and Board Thermal Insulation: Type IA, IB, IVA.
Insulation	Weight: 50mm - 178mm (2" - 7") Thickness	0.75 - 2.63 lb/ft² (3.66 - 12.84 kg/m²)
Insulation	Thickness Minimum	50mm (2")
Insulation	Density	72.1 kg/m³ (4.5 lb/ft³)
Insulation	Thermal Conductivity	0.033 W/cm · K (0.23 (BTU·in)/(hr.·ft²-°F), @ 75°F)
Insulation	Thermal Resistance	R-Value = 4.3 per inch, RSI = 0.74 per 25mm of thickness
Insulation	Attachment to substrate wall	Commercially accepted perforated Insulation Hangers ("stick-pins" by others) which are attached with a non-sag adhesive to the exterior wall air barrier surface to secure insulation



Table 1.2 - Component Information (cont'd)

Feature	Description	Value
Carrier Board	Size: Height x Width	1219.2mm x 2438.4mm (4' x 8')
Carrier Board	Thickness	12mm (¹ / ₂ ")
Carrier Board	Recycled content	StoVentec Carrier Board A+ is comprised of 90+%post-consumer recycled glass granulate
Carrier Board	Bending Tensile Strength, average	≈ 8 N/mm2 (1160 lb.in²) per DIN EN 100
Carrier Board	Bending Tensile Strength, minimum	≈ 5.5 N/mm2 (798 lb.in²)
Carrier Board	StoVentec Carrier Board A+ cantilever: vertical overhang of carrier board edge past vertically oriented StoVentro T/L profile.	38mm nominal (1- ¹ / ₂ ")
Carrier Board	StoVentec Carrier Board A+ cantilever: horizontal overhang of unsupported carrier board edge past StoVentro T-profile (reinforcing StoVentro L-profile behind carrier board NOT required)	< 152mm (< 6") Reference detail 90.M.049
Carrier Board	StoVentec Carrier Board A+ cantilever: Use of reinforcing StoVentro L-profile behind carrier board REQUIRED for horizontal overhang of carrier board edge past StoVentro T-profile	152mm (6") < length ≤ 406mm (≈ 16") Reference detail 90.M.049
Carrier Board	StoVentec Carrier Board A+ cantilever: Use of reinforcing StoVentro L-profile required in outside corner condition of two adjacent carrier boards	L-profile required
Carrier Board	Connection of T/L profiles in end-to-end connection	Large brackets are required to secure T/L profiles in end-to-end condition. Note: Brackets in this condition function as fixed point (FP)/gliding point (GP), or gliding point (GP)/gliding point (GP). Configuration of brackets in fixed point (FP)/fixed point (FP) condition is not recommended. See Detail 90.M.045-048.
Carrier Board	StoVentec Carrier Board A+ attachment at horizontal edges	51 mm (2") from edge
Carrier Board	StoVentec Carrier Board A+ attachment at vertical edges	25mm (1") from edge For reference, see Detail 90.M.001
Carrier Board	StoVentec Carrier Board A+ attachment at horizontal edge from edge of StoVentro T-profile	\geq 10mm ($^{3}/_{8}$ ") from edge For reference, see Detail 90.M.001
Carrier Board	StoVentec Carrier Board A+ attachment in field of carrier board to vertically oriented StoVentro T-profile	Installed in a staggered pattern, typically 152mm (6") o.c. Wind load for the project may dictate closer spacing. For reference, see Detail 90.M.001
Carrier Board	StoVentec Carrier Board A+ attachment at adjacent carrier boards to vertically oriented StoVentro T-profile	Installed in a straight pattern, typically 152mm (6") o.c. Wind load for the project may dictate closer spacing. For reference, see Detail 90.M.001
Masonry Veneer	Base Coat & Mesh	StoPrimer/Adhesive with Sto Mesh 6oz. embedded
Masonry Veneer	Thickness (Sto Base Coat and Sto Mesh)	Nominal ¹ / ₁₆ "(1.6mm)



Table 1.2 - Component Information (cont'd)

Feature	Description	Value
Masonry Veneer	Primer	Use of primer is required over the StoVentec Carrier Board A+ prior to application of StoPrimer/Adhesive Base Coat.
Masonry Veneer	Adhesive	StoKoll KM adhesive mortar, compliant with ANSI 118.4
Masonry Veneer	Thin Brick	9psf maximum (43.9 kg/m²)
Masonry Veneer	Thin Brick	\leq 51mm (2") thick, \leq 914mm (36") in any face dimension and \leq 0.465m ² (5 ft ²) in area.
Masonry Veneer	Thin Brick	Standards compliance and selection: comply with ASTM C1088, type suitable for environmental exposure, and as certified by manufacturer
Masonry Veneer	Grout/Pointing Mortar	ANSI 118.7 compliant portland cement-based grout. System must be grouted / pointed. Open joints are not permitted.

Table 1.3 - Testing & Listing Information

Feature	Description	Value
Listing	Fire Spread	NFPA 285, STO/CWP-30-01, CSI Section Numbers: 07 42 00 Wall Panels, 07 42 43 Composite Wall Panels.
Listing	Fire Spread	CAN / ULC S134, STO/CWP 25-02, CSI Section Numbers: 07 42 00 Wall Panels, 07 42 43 Composite Wall Panels
Product Evaluation	Fire Spread	Intertek 104333348TOR-001
Listing	National Technical Approval, Germany	DIBt Z-103-700, - Ventilated Rainscreen Cladding Façade System with adhered thin veneers. (DIN 18516)
Listing	Fire Resistance of Wall Assemblies	ASTM E119, Engineering Judgment by Jensen Hughes Fire Protection Consultants, will maintain fire resistance rating of backup wall
Test	Water Penetration Resistance	AAMA 509, water penetration rating, Class W1
Test	Ventilation	AAMA 509, ventilation rating V9
Test	Wind Load Resistance (Ultimate wind load capacity)	ASTM E330, +5.74 kN/m ^{2,} -4.31 kN/m ² (120 lb/ft ² , -90 lb/ft ²)
Test	Masonry Veneer Adhesive: StoColl KM	Compliance with ANSI 118.4
Test	Masonry Veneer Adhesive Shear Bond	> 50psi (345kPa)



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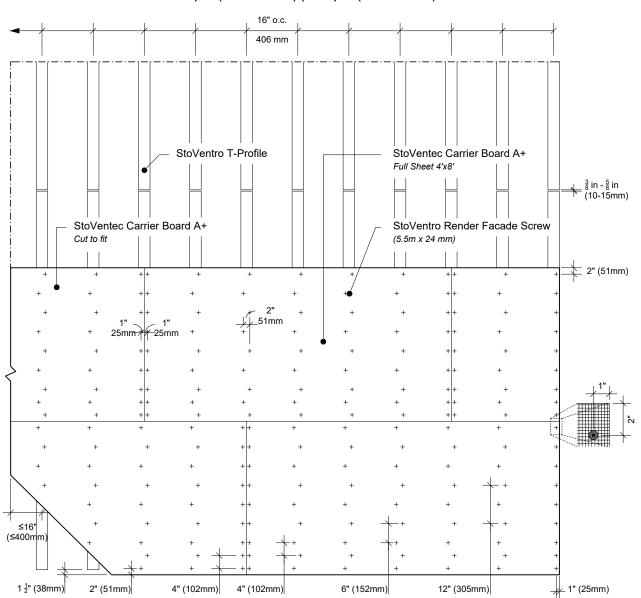
Date: June 2021

StoVentec® for Masonry Veneer Facades

StoVentec Carrier Board A+ Attachment to StoVentro[™] T-Profile, spaced at 16" o.c.(406mm) Field and Edge fastening of StoVentec Carrier Board A+ to StoVentro T-Profiles.

Elevation View Detail No.: 90.M.001

Ultimate Wind Load Capacity, based on ASTM E330 wind load testing: +120 psf (5.75 kN/m²) | -90 psf (4.31 kN/m²)



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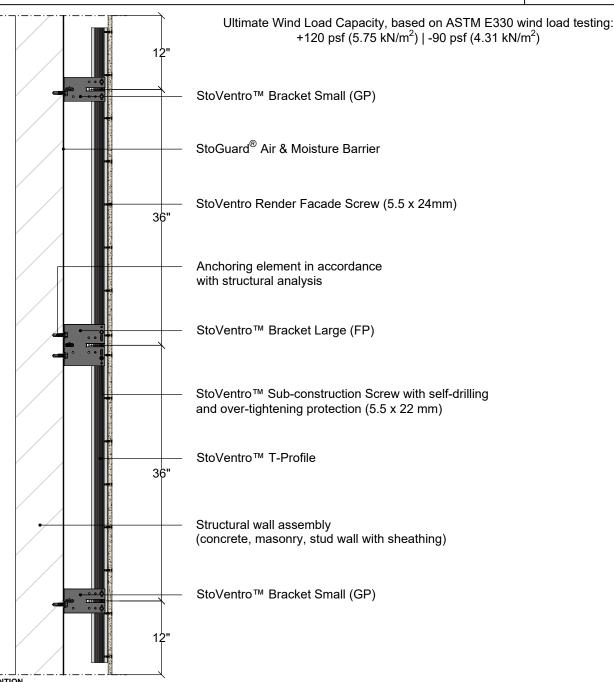
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StoVentec[®] for Masonry Veneer FacadesStoVentro[™] Bracket Installation, spaced at 36" o.c. (914mm)

Date: June 2021

Section View Detail No.: 90.M.002



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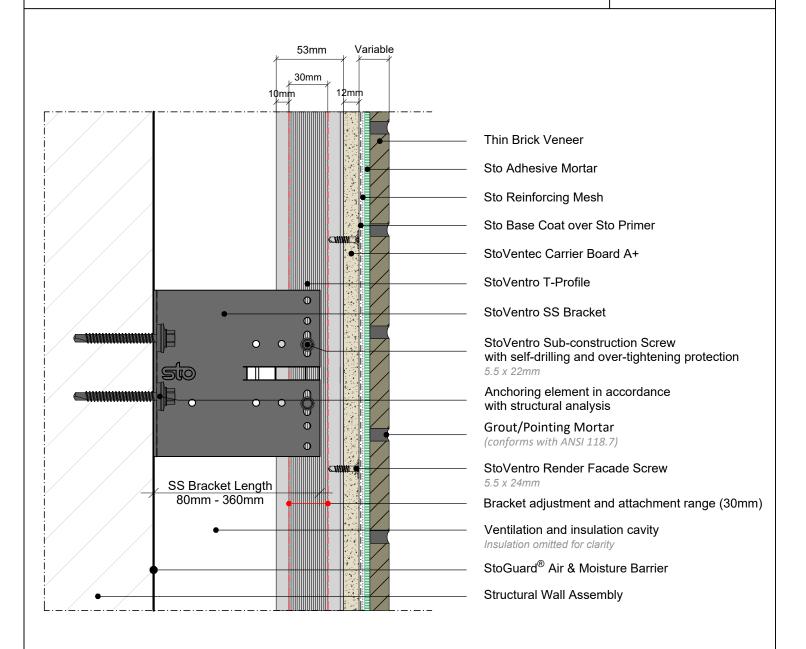
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System buildup with Thin Brick Veneer Stainless Steel Brackets
Section View

Detail No.: 90.M.020

Date: June 2021



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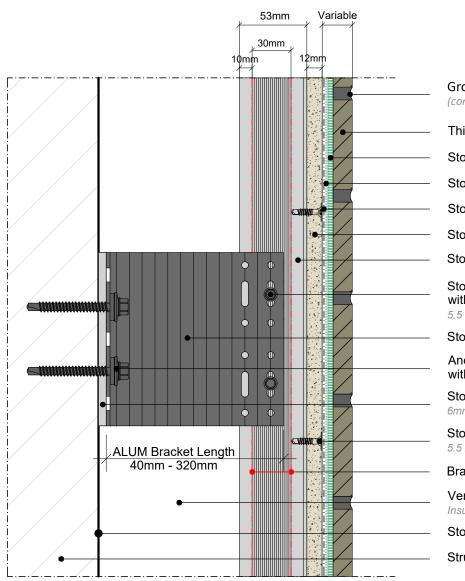


System buildup with Thin Brick Veneer Aluminum Brackets

Section View

Date: June 2021

Detail No.: 90.M.021



Grout/Pointing Mortar

(conforms with ANSI 118.7)

Thin Brick Veneer

Sto Adhesive Mortar

Sto Reinforcing Mesh

Sto Base Coat over Sto Primer

StoVentec Carrier Board A+

StoVentro T-Profile

StoVentro Sub-construction Screw with self-drilling and over-tightening protection

5.5 x 22mm

StoVentro ALUM Bracket

Anchoring element in accordance with structural analysis

StoVentro Thermal Blocking Element

6mm thick

StoVentro Render Facade Screw

5.5 x 24mm

Bracket adjustment and attachment range (30mm)

Ventilation and insulation cavity

Insulation omitted for clarity

StoGuard® Air & Moisture Barrier

Structural Wall Assembly

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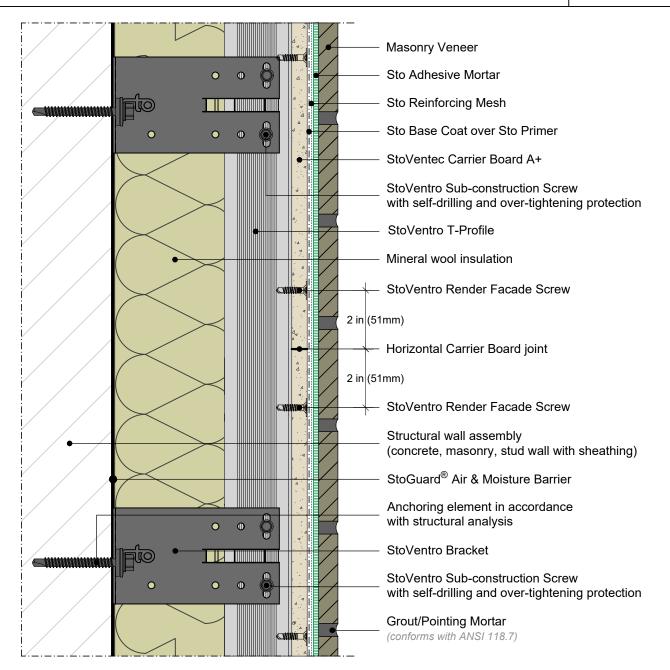
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StoVentec Carrier Board A+ Installation at Horizontal Board Joint

Date: June 2021

Section View Detail No.: 90.M.030



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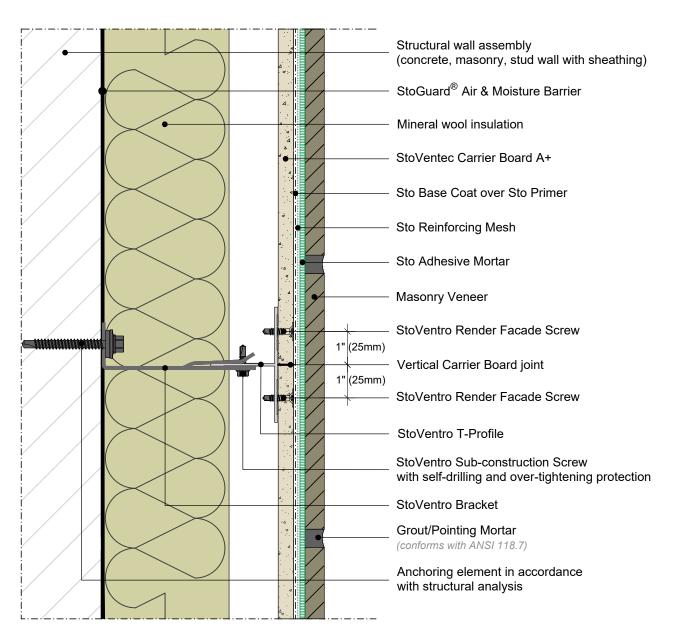
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StoVentec Carrier Board A+ Installation at Vertical Board Joint

Date: June 2021

Plan View Detail No.: 90.M.031



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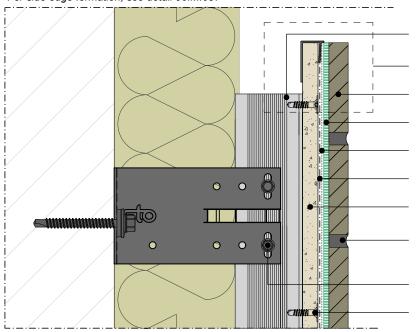


System edge formations with surrounding Sto Edge Protection Profiles Top edge formation, used only at non-weather exposed areas

Date: June 2021

Detail No.: 90.M.035

For bottom edge formation, see detail 90.M.036 For side edge formation, see detail 90.M.037



StoVentro T-Profile

See Edge Formation Options Below

Masonry Veneer

Sto Adhesive Mortar

Sto Reinforcing Mesh

Sto Base Coat over Sto Primer

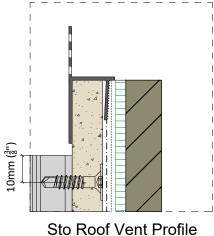
StoVentec Carrier Board A+

Grout/Pointing Mortar

(conforms with ANSI 118.7)

StoVentro Sub-construction Screw with self-drilling and over-tightening protection

StoVentro Render Facade Screw



Typically used at top of system, soffits, sills with flashing



Typically used at top of system, soffits, sills with flashing

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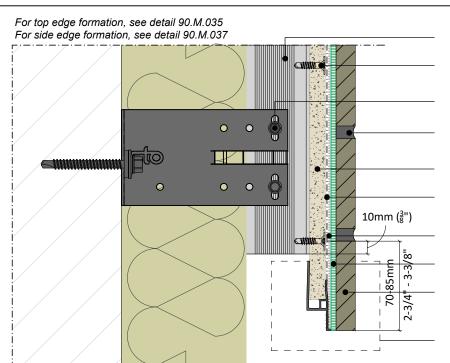


System edge formations with surrounding Sto Edge Protection Profiles Bottom edge formation

Section View

Date: June 2021

Detail No.: 90.M.036



StoVentro T-Profile

StoVentro Render Facade Screw

StoVentro Sub-construction Screw with self-drilling and over-tightening protection

Grout/Pointing Mortar

(conforms with ANSI 118.7)

StoVentec Carrier Board A+

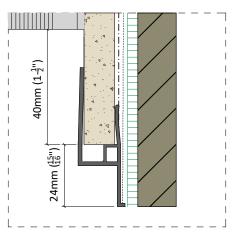
Sto Base Coat over Sto Primer

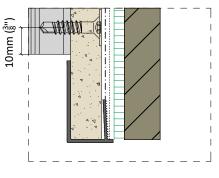
Sto Reinforcing Mesh

Sto Adhesive Mortar

Masonry Veneer

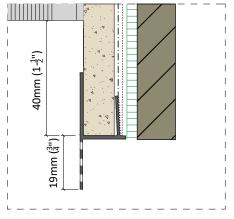
See Edge Formation Options Below





Sto Edge Protection Profile G

Typically used at bottom edge of expansion joints and bottom of system



Sto Roof Vent Profile

Typically used at bottom of system

Sto Edge Protection Profile GT

Typically used at bottom edge of expansion joints and bottom of system

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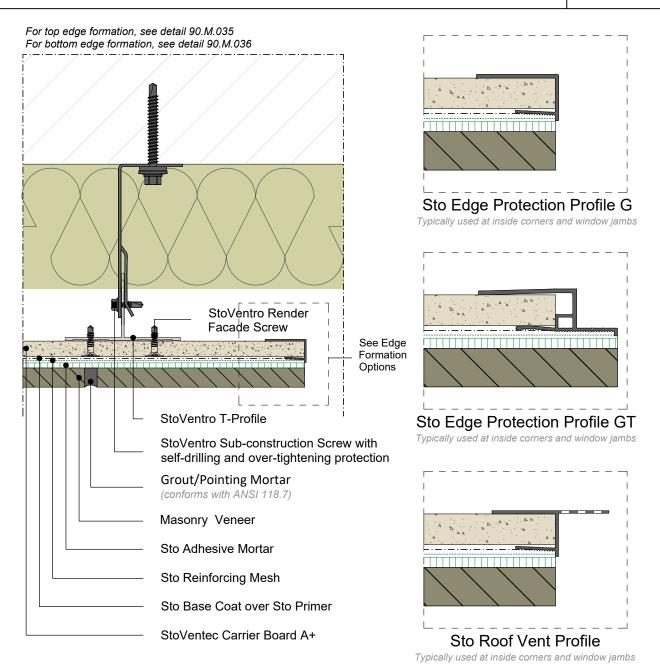
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System edge formations with surrounding Sto Edge Protection Profiles Side edge formation, used only at non-weather exposed areas

Date: June 2021

Detail No.: 90.M.037



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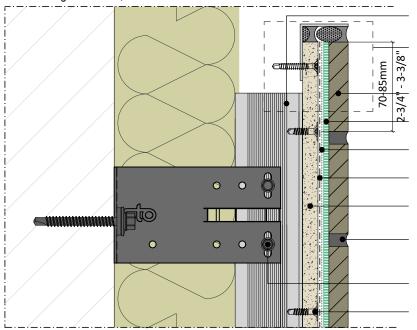
System edge formations with surrounding aluminum Top edge formation

Section View

Date: June 2021

Detail No.: 90.M.040

For bottom edge formation, see detail 90.M.041 For side edge formation, see detail 90.M.042



StoVentro T-Profile

See Edge Formation Options Below

Masonry Veneer

Sto Adhesive Mortar

Sto Reinforcing Mesh

Sto Base Coat over Sto Primer

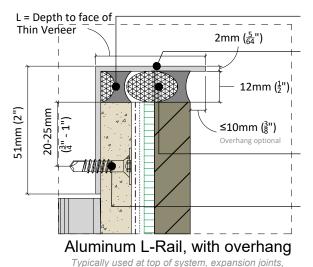
StoVentec Carrier Board A+

Grout/Pointing Mortar

(conforms with ANSI 118.7)

StoVentro Sub-construction Screw with self-drilling and over-tightening protection

StoVentro Render Facade Screw



Sealant over half-round Backer Rod (by others)

Aluminum L-Rail (by others)

Backer Rod and Sealant (by others)

StoVentro Render Facade Screw (5.5 x 24mm) Horizontal spacing, approx. 300mm (11-3/4"), Edge spacing 20-25mm ($\frac{3}{4}$ "-1")

window sills, and soffits (by others)

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System edge formations with surrounding aluminum Bottom edge formation

Section View

Date: June 2021

Detail No.: 90.M.041

For top edge formation, see detail 90.M.040
For side edge formation, see detail 90.M.042

10mm (3")

StoVentro T-Profile

StoVentro Render Facade Screw

StoVentro Sub-construction Screw with self-drilling and over-tightening protection

Grout/Pointing Mortar

(conforms with ANSI 118.7)

StoVentec Carrier Board A+

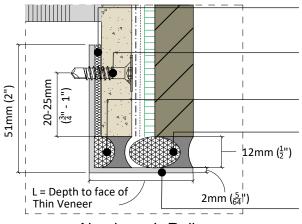
Sto Base Coat over Sto Primer

Sto Reinforcing Mesh

Sto Adhesive Mortar

Masonry Veneer

See Edge Formation Options Below



Stick StoGuard Tape flush with the profile edge (cut to size)

StoVentro Render Facade Screw (5.5 x 24mm) Horizontal spacing, approx. 300mm (11-3/4"), Edge spacing 20-25mm ($\frac{3}{4}$ "-1")

Sealant over half-round Backer Rod (by others)

Backer Rod and Sealant (by others)

Aluminum L-Rail (by others)

Aluminum L-Rail

Typically used at bottom edge of expansion joints, bottom of system, window heads, and soffits (by others)

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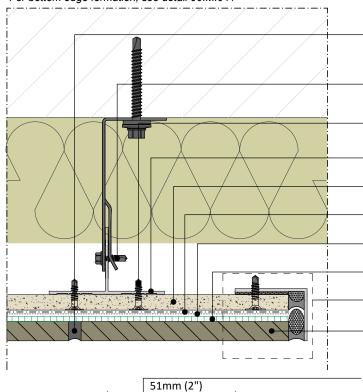
Date: June 2021

StoVentec® for Masonry Veneer Facades

System edge formations with surrounding aluminum Side edge formation

Detail No.: 90.M.042 Plan View

For top edge formation, see detail 90.M.040 For bottom edge formation, see detail 90.M.041



20-25mm - 1") L = Depth to face of Thin Veneer $2mm \left(\frac{5}{64} \right)$ Aluminum L-Rail 12mm (½") Typically used at side edge of expansion joints,

Grout/Pointing Mortar

(conforms with ANSI 118.7)

StoVentro Sub-construction Screw with self-drilling and over-tightening protection

StoVentro Render Facade Screw

StoVentro T-Profile

StoVentec Carrier Board A+

Sto Base Coat over Sto Primer

Sto Reinforcing Mesh

Sto Adhesive Mortar

See Edge Formation Options

Masonry Veneer

StoVentro Render Facade Screw (5.5 x 24mm) Vertical spacing, approx. 300mm (11-3/4"), Edge spacing 20-25mm ($\frac{3}{4}$ "-1")

Stick StoGuard Tape flush with the profile edge (cut to size)

Sealant over half-round Backer Rod (by others)

Backer Rod and Sealant (by others)

Aluminum L-Rail (by others)

side edge of system, window jambs, and inside corners (by others)

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Building with conscience.

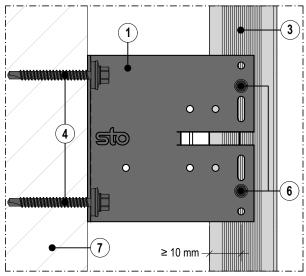
StoVentec® for Masonry Veneer Facades

StoVentro™ Stainless Steel Brackets - Large (FP) and Small (GP), with attachment locations for fixed points and sliding points

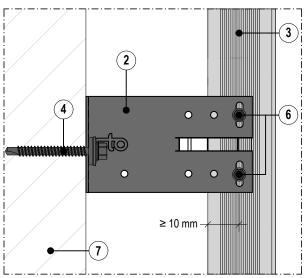
Section View

Date: June 2021

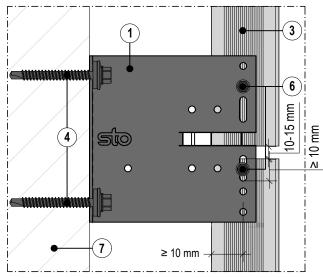
Detail No.: 90.M.045



StoVentro™ SS Bracket - Large (FP) | Fixed point fastening

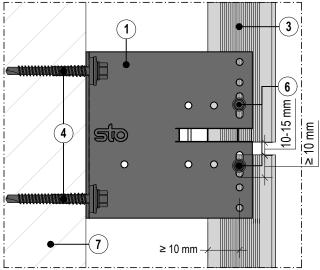


StoVentro™ SS Bracket - Small (GP) | Sliding point fastening



StoVentro™ SS Bracket - Large (FP) | Fixed & sliding point fastening

- 1 StoVentro™ SS Bracket Large (FP)
- 2 StoVentro™ SS Bracket Small (GP)
- 3 StoVentro™ T-Profile
- Anchoring element in accordance with structural analysis



StoVentro™ SS Bracket - Large (FP) | Sliding point fastening

- 6 StoVentro™ Sub-construction Screw with self-drilling and over-tightening protection (5.5 x 22 mm)
- Structural wall assembly (concrete, masonry, stud wall with sheathing)

Note: All values are subject to structural analysis.

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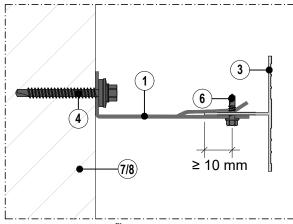
StoVentro™ Stainless Steel Brackets - Large (FP) and Small (GP) attachment locations

Elevation & Plan Views

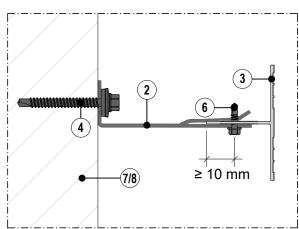
Date: June 2021

Detail No.: 90.M.046

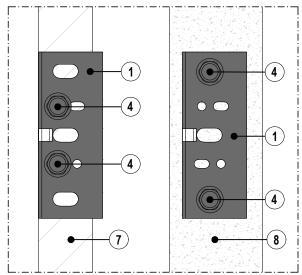
Note: All values are subject to structural analysis.



StoVentro[™] SS Bracket - Large (FP) Plan View Attachment



StoVentro[™] SS Bracket - Small (GP) Plan View Attachment



StoVentro™ SS Bracket - Large (FP) Elevation View Attachment

2 - 2 - 4 - 4 - 4 - 8

StoVentro™ SS Bracket - Small (GP) Elevation View Attachment

- 1 StoVentro™ SS Bracket Large (FP)
- 2 StoVentro™ SS Bracket Small (GP)
- 3 StoVentro™ T-Profile
- Anchoring element in accordance with structural analysis
- 6 StoVentro™ Sub-construction Screw with self-drilling and over-tightening protection (5.5 x 22 mm)
- 7 Structural wall assembly (stud wall with sheathing)
- (8) Structural wall assembly (concrete and masonry)

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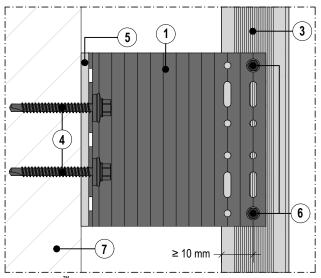


StoVentro™ Aluminum Brackets - Large (FP) and Small (GP), with attachment locations for fixed points and sliding points

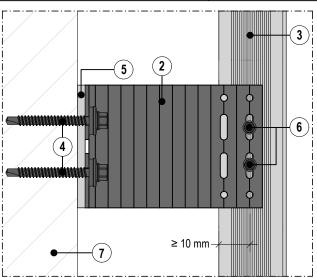
Section View

Date: June 2021

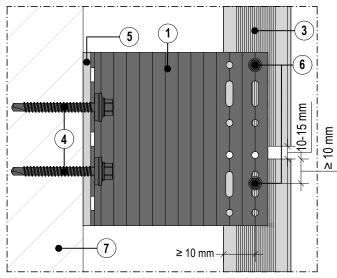
Detail No.: 90.M.047



StoVentro[™] ALUM Bracket - Large (FP) | Fixed point fastening



StoVentro[™] ALUM Bracket - Small (GP) | Sliding point fastening



StoVentro™ ALUM Bracket - Large (FP) | Fixed & sliding point fastening StoVentro™ ALUM Bracket - Large (FP) | Sliding point fastening

- 1 StoVentro™ ALUM Bracket Large (FP)
- 2 StoVentro™ ALUM Bracket Small (GP)
- (3) StoVentro™ T-Profile
- 4 Anchoring element in accordance with structural analysis
- 5 StoVentro™ Thermal Blocking Element
- StoVentro™ Sub-construction Screw with self-drilling and over-tightening protection (5.5 x 22 mm)
- The structural wall assembly (concrete, masonry, stud wall with sheathing)

Note: All values are subject to structural analysis.

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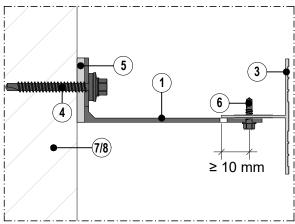
StoVentro™ Aluminum Brackets - Large (FP) and Small (GP) attachment locations

Elevation & Plan Views

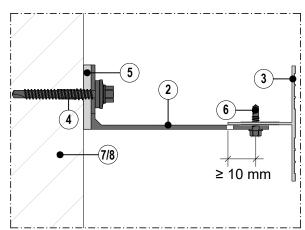
Date: June 2021

Detail No.: 90.M.048

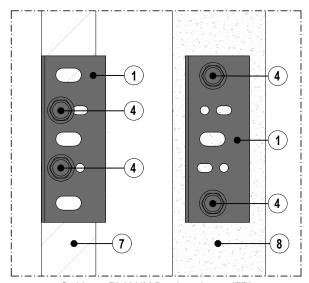
Note: All values are subject to structural analysis.



StoVentro[™] ALUM Bracket - Large (FP) Plan View Attachment



StoVentro[™] ALUM Bracket - Small (GP) Plan View Attachment



StoVentro™ ALUM Bracket - Large (FP) Elevation View Attachment

StoVentro™ ALUM Bracket - Small (GP) Elevation View Attachment

- 1 StoVentro™ ALUM Bracket Large (FP)
- 2 StoVentro™ ALUM Bracket Small (GP)
- 3 StoVentro™ T-Profile
- Anchoring element in accordance with structural analysis
- 5 StoVentro™ Thermal Blocking Element
- StoVentro™ Sub-construction Screw with self-drilling and over-tightening protection (5.5 x 22 mm)
- 7) Structural wall assembly (stud wall with sheathing)
- (8) Structural wall assembly (concrete and masonry)

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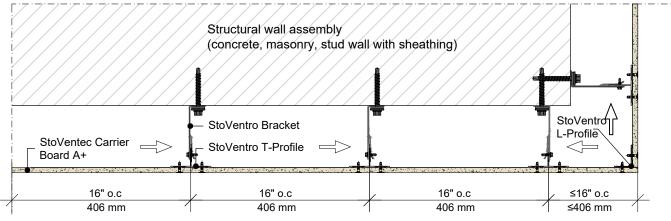
Date: June 2021

StoVentec® for Masonry Veneer Facades

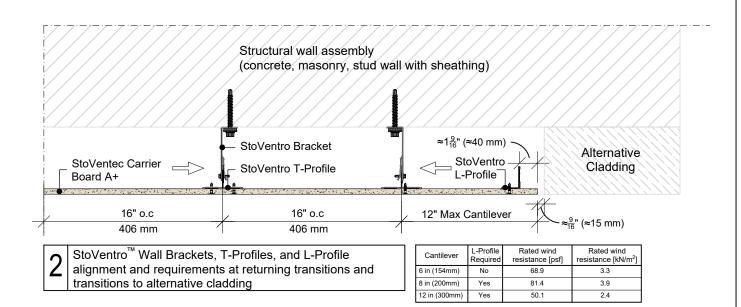
StoVentro[™] Sub-construction Installation at outside corners, jambs, returning transitions, and transitions to alternative cladding

Plan View Detail No.: 90.M.049

Recommended fastening direction for connection of the StoVentro[™] Wall Brackets to the StoVentro[™] T-profile and alignment of the wall brackets



StoVentro[™] Wall Brackets and T-Profile alignment and requirements at outside corners, jambs and returning transitions.



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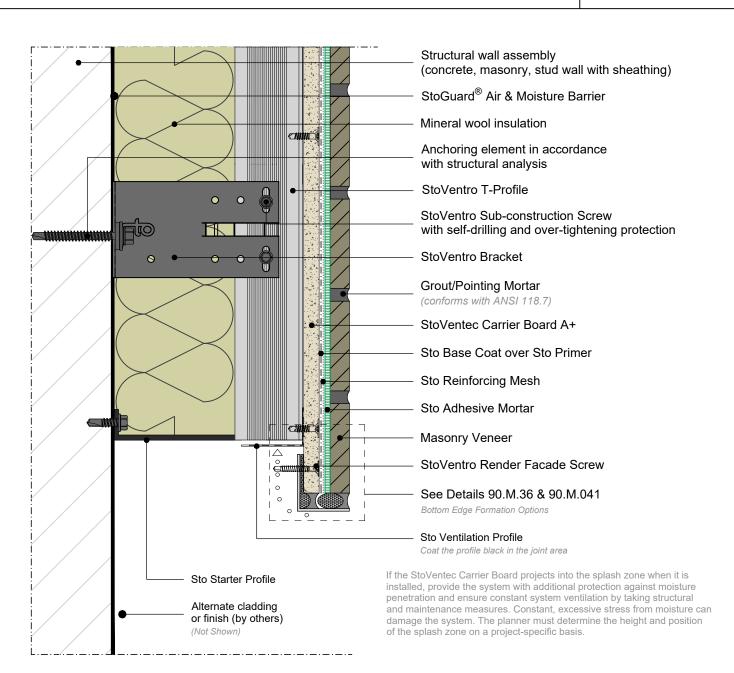


Installation at grade with Sto Ventilation Profile, uninsulated (exposed substrate at grade)

Section View

Date: June 2021

Detail No.: 90.M.055



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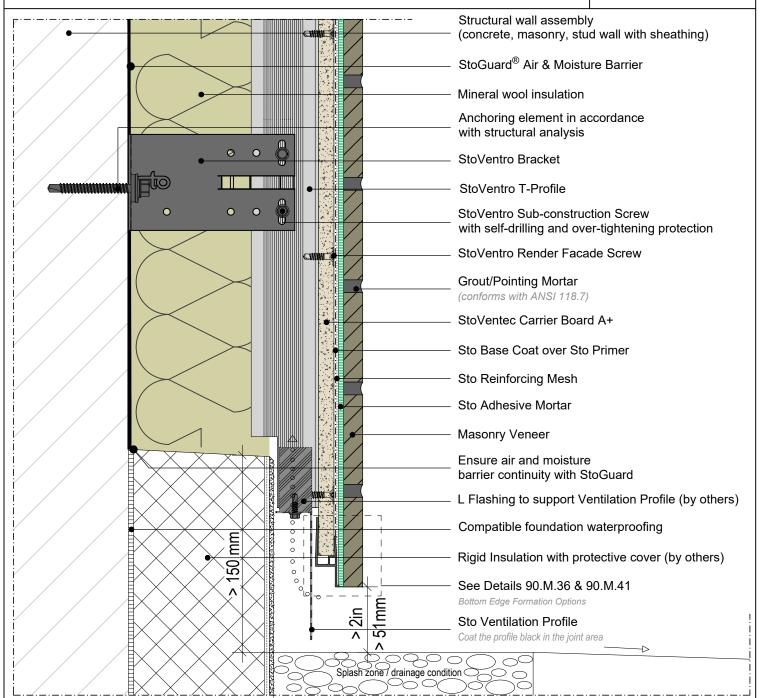


Date: June 2021

StoVentec® for Masonry Veneer Facades

Installation at grade with Sto Ventilation Profile, insulated

Section View Detail No.: 90.M.065



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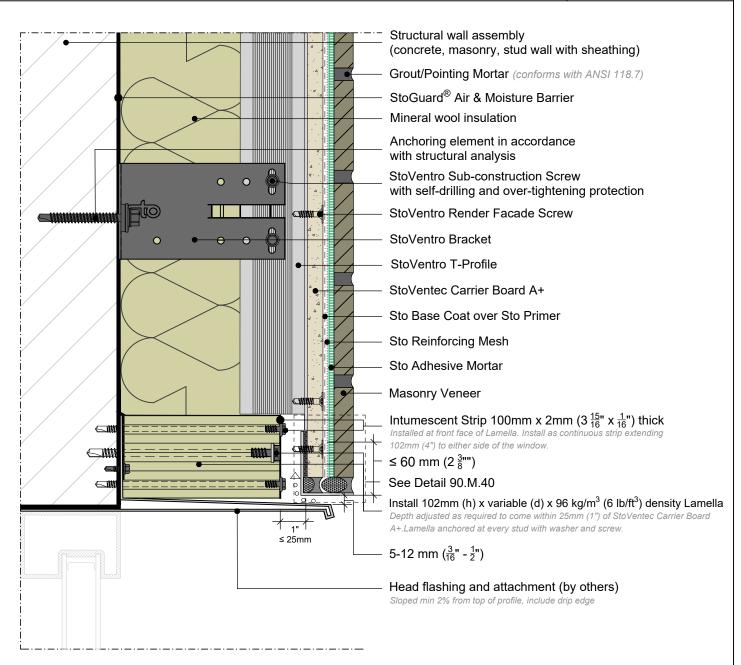
GENV-RC-SAR-0102



Fire protection at Window Head with Lamella and Intumescent Tape CAN ULC S134 Compliant, Intertek Deisgn Listing No. STO/CWP 25-01 NFPA 285 Compliant, Intertek Design Listing No. STO/CWP 30-02 Section View

Date: June 2021

Detail No.: 90.M.080



ATTENTION

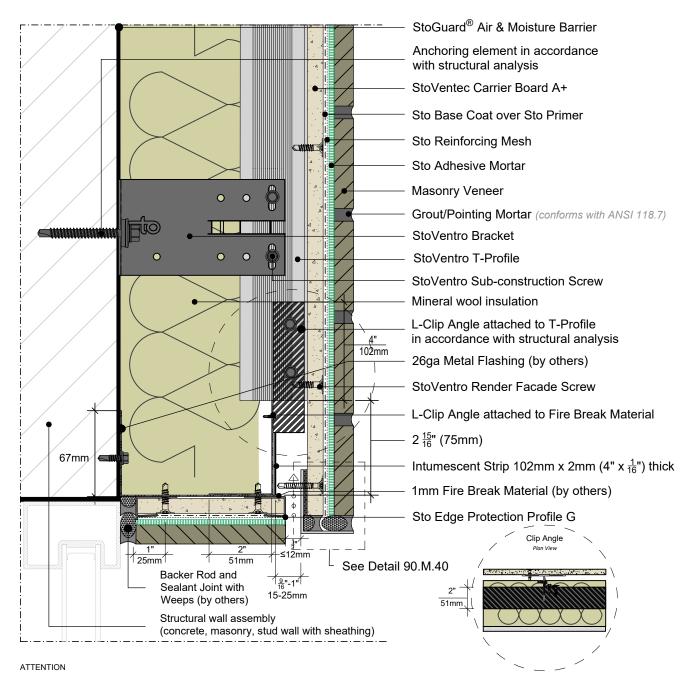
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Fire protection at Window Head with Fire Break Material CAN ULC S134 Compliant, Intertek Deisgn Listing No. STO/CWP 25-01 NFPA 285 Compliant, Intertek Design Listing No. STO/CWP 30-02 Section View

Date: June 2021

Detail No.: 90.M.081



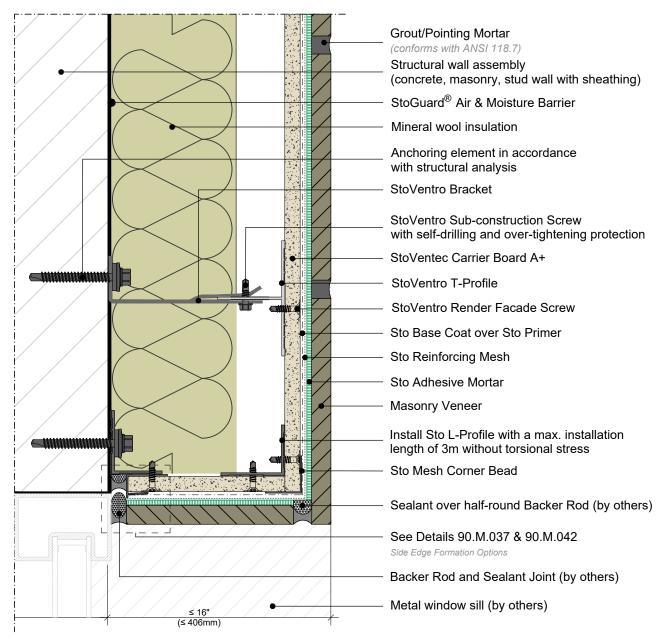
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StoVentec® for Masonry Veneer Facades

Window Jamb with Backer Rod and Sealant Joint

Plan View Detail No.: 90.M.085



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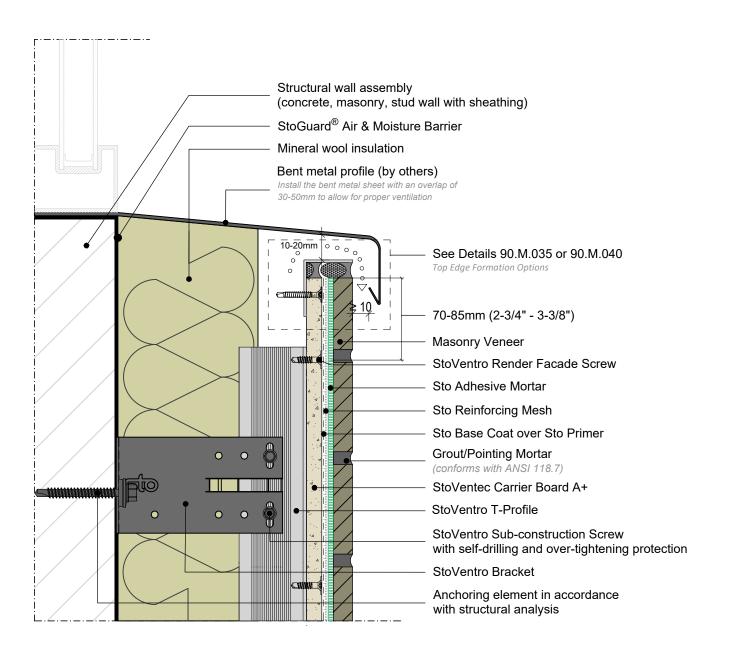
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StoVentec® for Masonry Veneer Facades

Window Sill

Section View Detail No.: 90.M.090



ATTENTION

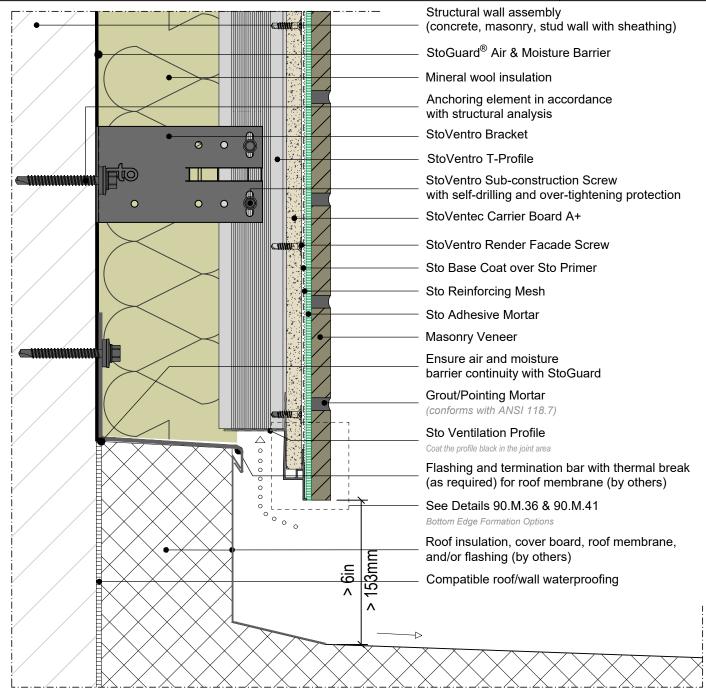
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StoVentec® for Masonry Veneer Facades

Installation at Roofline

Section View Detail No.: 90.M.150



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GENV-RC-SAR-0350

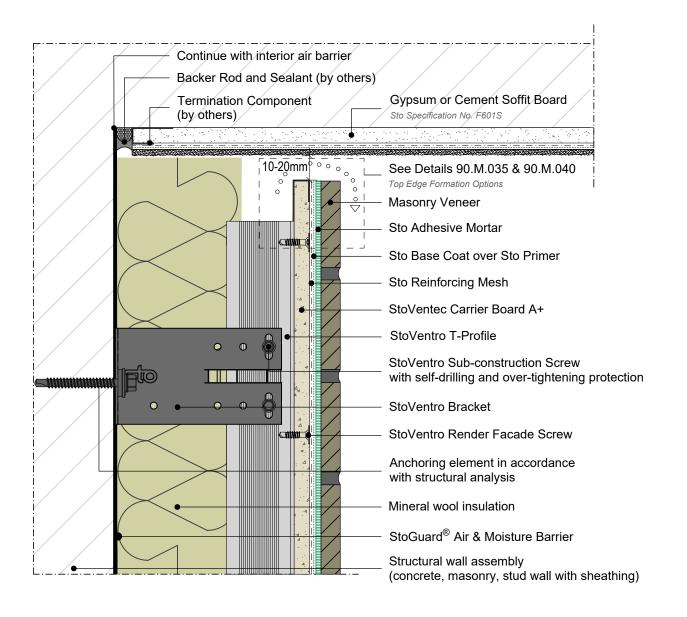


Soffit or Ceiling Installation - Not Insulated (Unconditioned)
StoVentec MVES and Sto Direct-applied Finish System for Soffits and Ceilings
Section View

Date: June 2021

Detail No.: 90.M.161

Note: Direct-applied Exterior Finish System (DEFS) for use on weather protected walls and vented uninsulated exterior soffit and ceiling applications.



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StoVentec® for Masonry Veneer Facades

O

Parapet with 10mm ventilation gap

Section View Detail No.: 90.M.180

0

Parapet (by others)

See Details 90.M.35 & 90.M.40
Top Edge Formation Options



in accordance with regulations for metalwork in the roofing trade

Anchoring element in accordance with structural analysis

StoVentro Sub-construction Screw with self-drilling and over-tightening protection

Grout/Pointing Mortar

(conforms with ANSI 118.7)

StoVentro T-Profile

StoVentro Bracket

StoVentec Carrier Board A+

Mineral wool insulation

StoVentro Render Facade Screw

Masonry Veneer

Sto Adhesive Mortar

Sto Reinforcing Mesh

Sto Base Coat over Sto Primer

StoGuard® Air & Moisture Barrier

Structural wall assembly (concrete, masonry, stud wall with sheathing)

ATTENTION

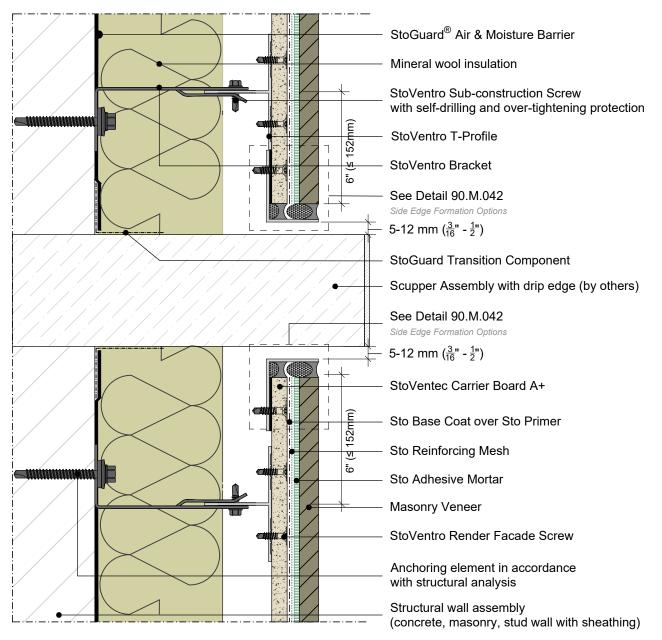
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StoVentec® for Masonry Veneer Facades

Scupper Penetration with Open Joints

Plan View Detail No.: 90.M.300



ATTENTION

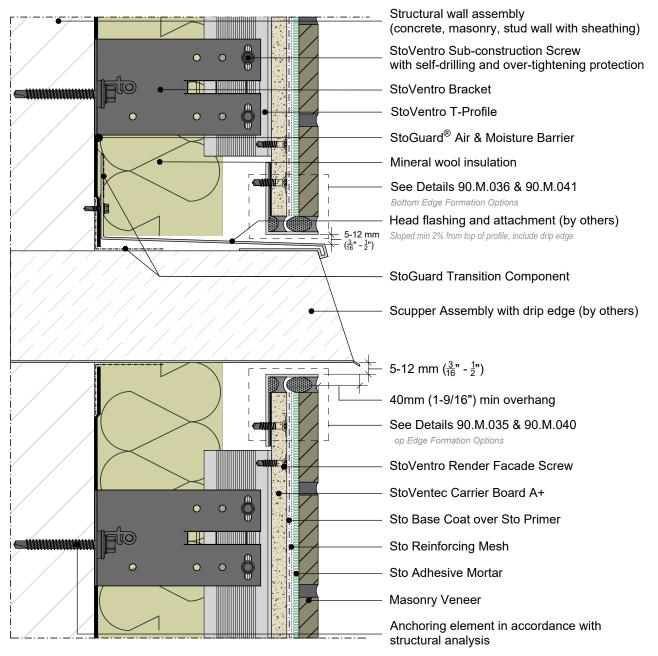
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StoVentec® for Masonry Veneer Facades

Scupper Penetration, Flashing with Open Joints

Section View Detail No.: 90.M.301



ATTENTION

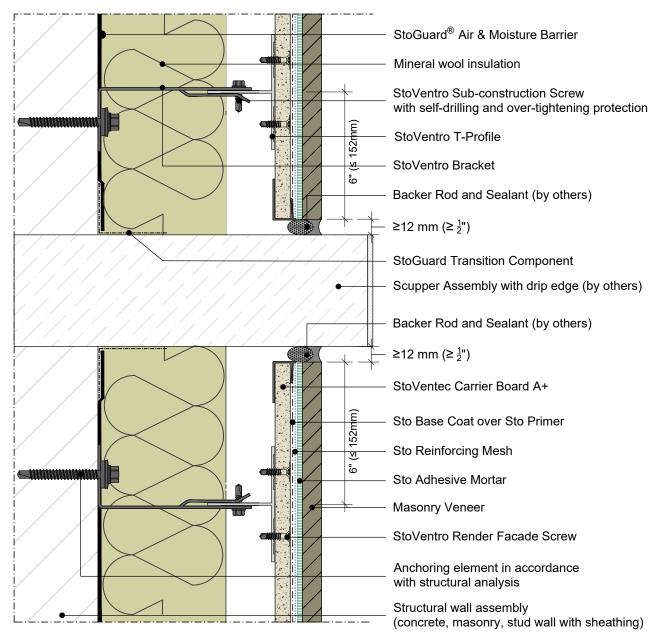
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StoVentec® for Masonry Veneer Facades

Scupper Penetration with Backer Rod and Sealant

Plan View Detail No.: 90.M.302



ATTENTION

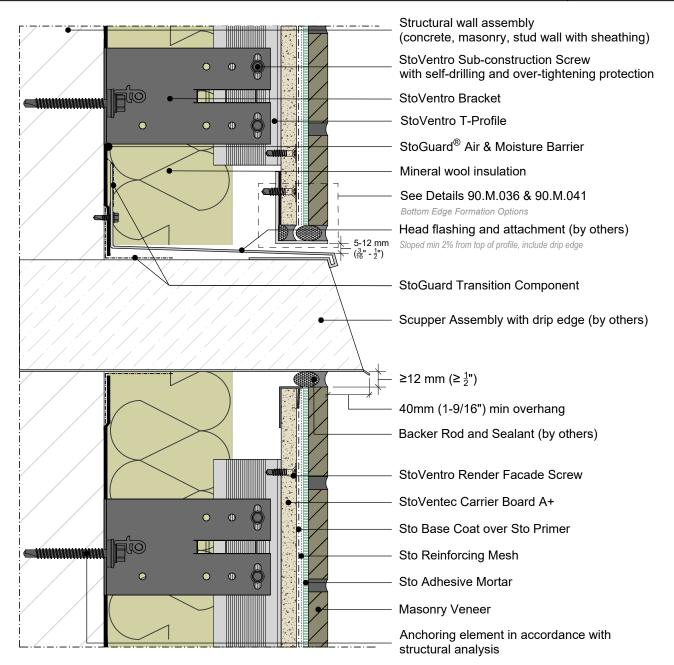
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StoVentec® for Masonry Veneer Facades

Scupper Penetration, Flashing with Backer Rod and Sealant

Section View Detail No.: 90.M.303



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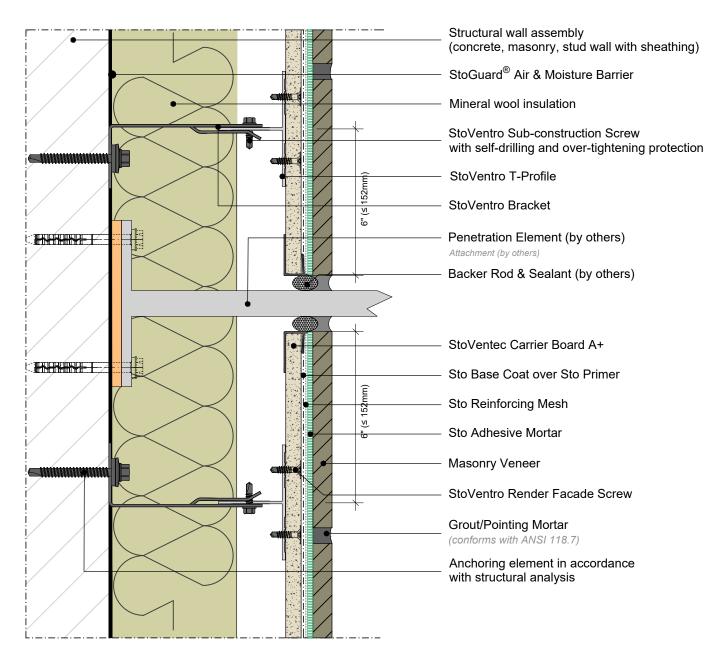
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StoVentec® for Masonry Veneer Facades

Penetration with Backer Rod and Sealant

Plan View Detail No.: 90.M.330



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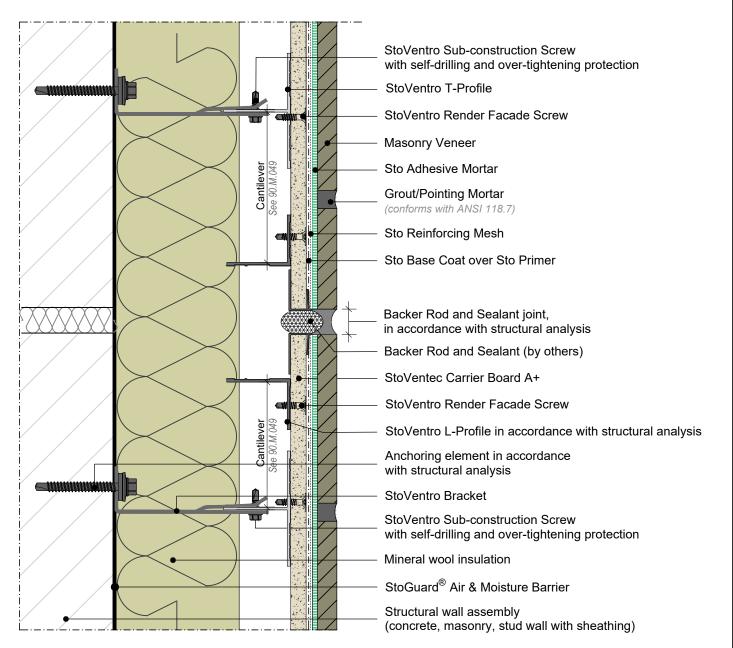
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StoVentec® for Masonry Veneer Facades

Wall Structural Joint with Backer Rod and Sealant

Plan View Detail No.: 90.M.390



ATTENTION

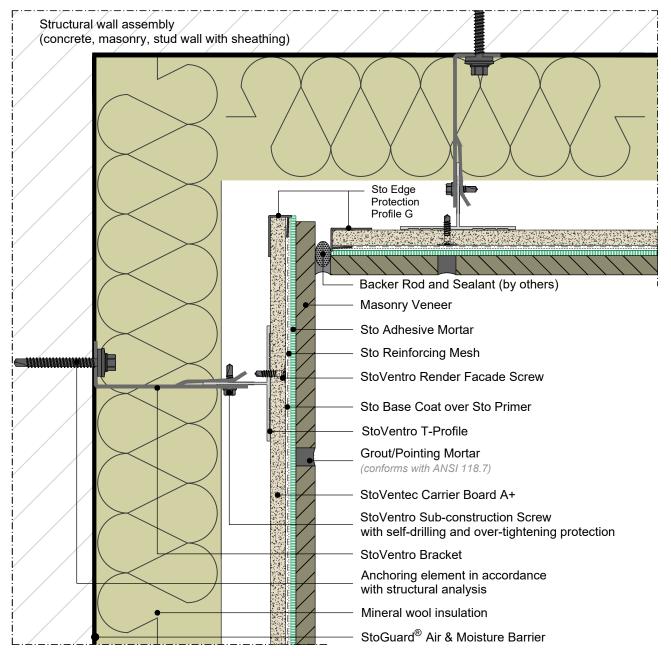
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Inside Corner with Backer Rod and Sealant Joint

Date: June 2021

Plan View Detail No.: 90.M.400



ATTENTION

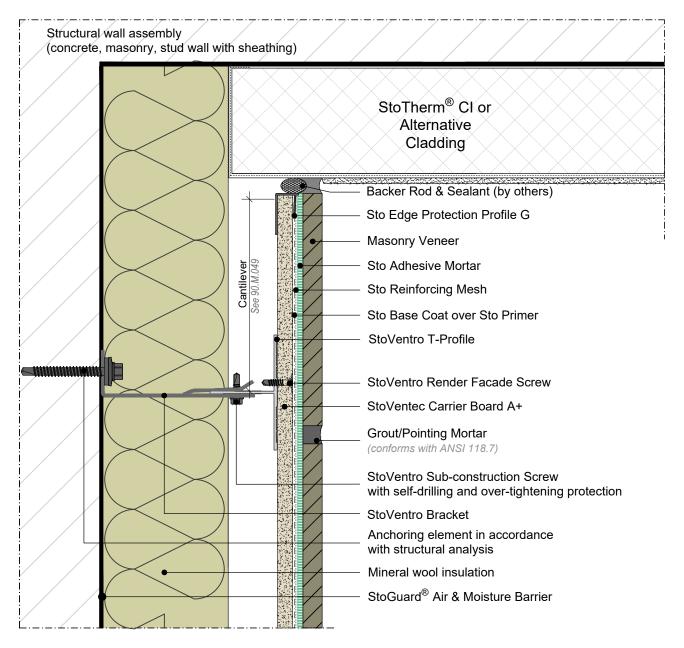
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Installation at Inside Corner to alternative facade with Backer Rod and Sealant

Date: June 2021

Plan View Detail No.: 90.M.409



ATTENTION

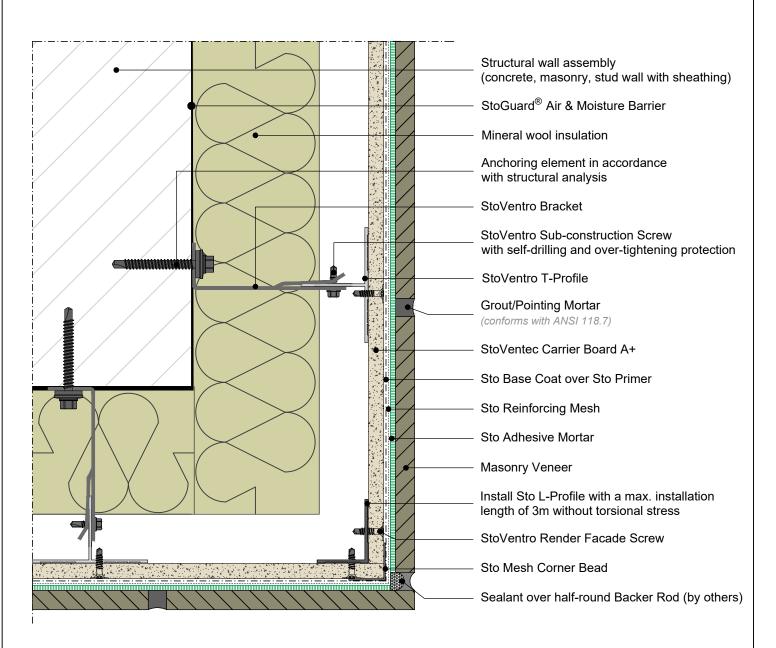
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Outside Corner

Date: June 2021

Plan View Detail No.: 90.M.410



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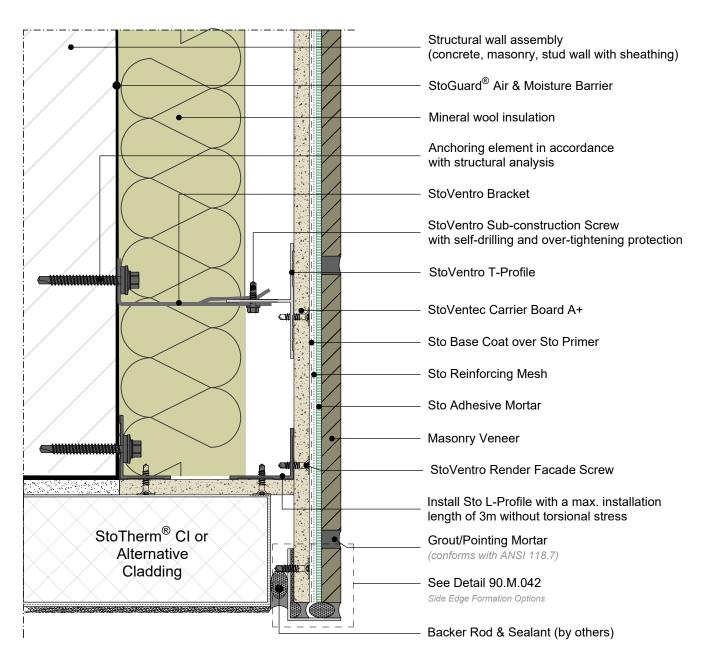
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StoVentec® for Masonry Veneer Facades

Installation at Outside Corner to alternative facade

Plan View Detail No.: 90.M.419



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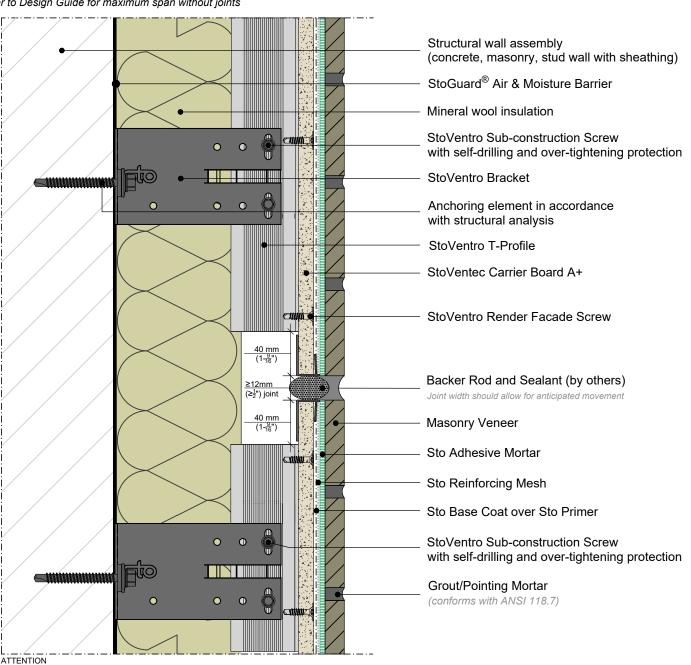
Horizontal Expansion Joint with Backer Rod and Sealant

Detail No.: 90.M.450

Date: June 2021

Section View

Refer to Design Guide for maximum span without joints



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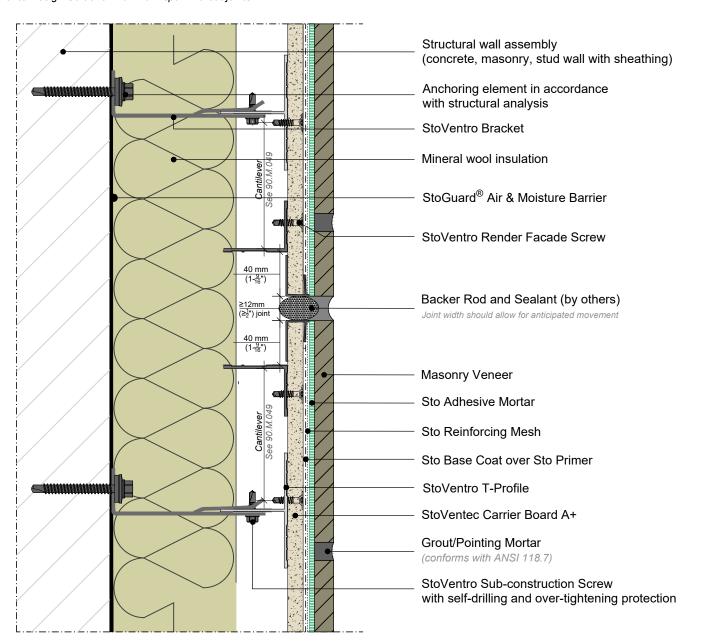
Vertical Expansion Joint with Backer Rod and Sealant

Date: June 2021

Plan View

Detail No.: 90.M.460

Refer to Design Guide for maximum span without joints



ATTENTION

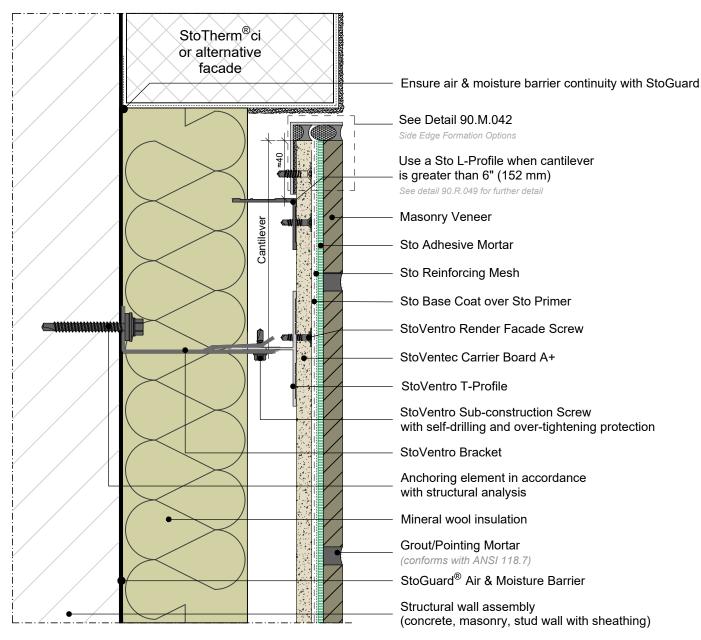
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Vertical Transition of StoVentec to Alternative Facade

Date: June 2021

Plan View Detail No.: 90.M.470



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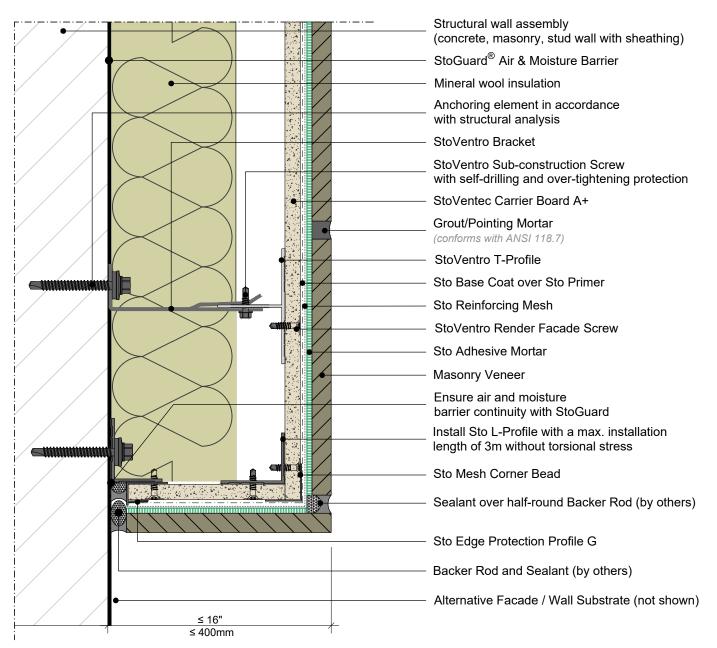
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StoVentec® for Masonry Veneer Facades

Returning StoVentec to Alternative Facade/Wall Substrate

Plan View Detail No.: 90.M.474



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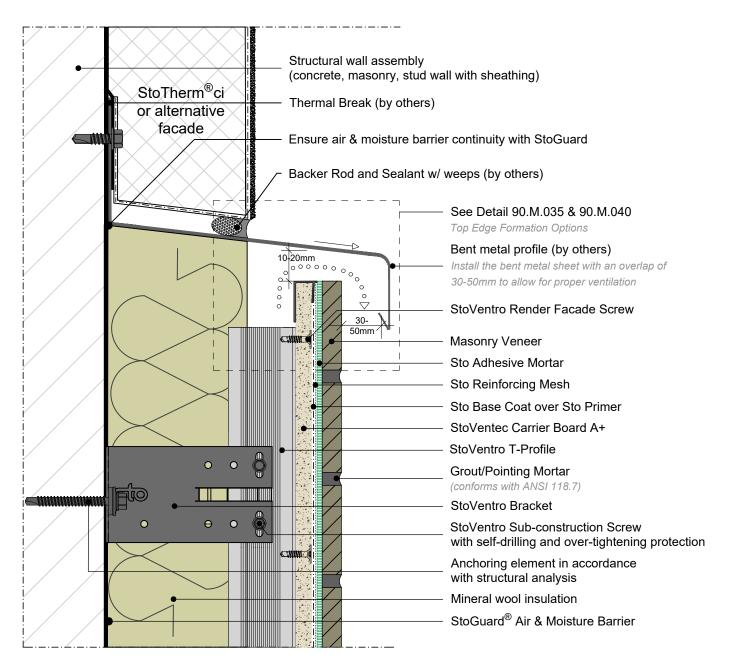
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StoVentec® for Masonry Veneer Facades

Horizontal transition to alternative facade above

Section View Detail No.: 90.M.475



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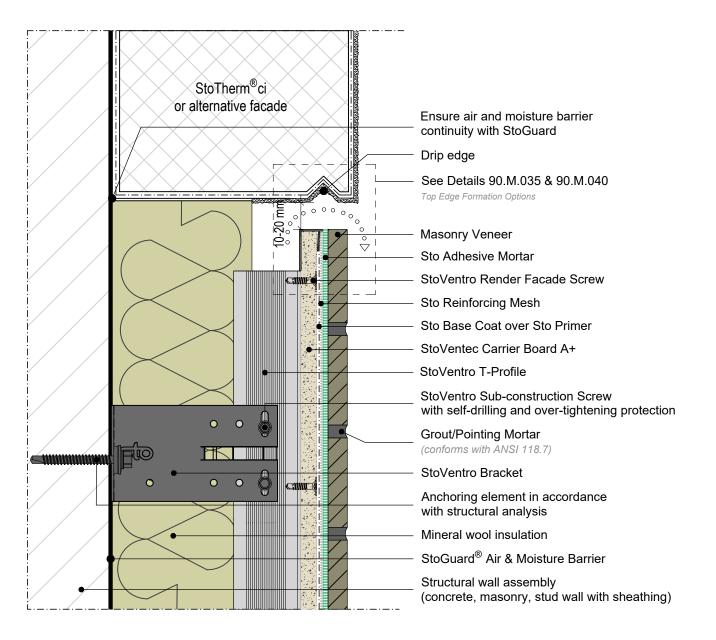
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StoVentec® for Masonry Veneer Facades

Horizontal Transition of StoVentec under alternative facade

Section View Detail No.: 90.M.476



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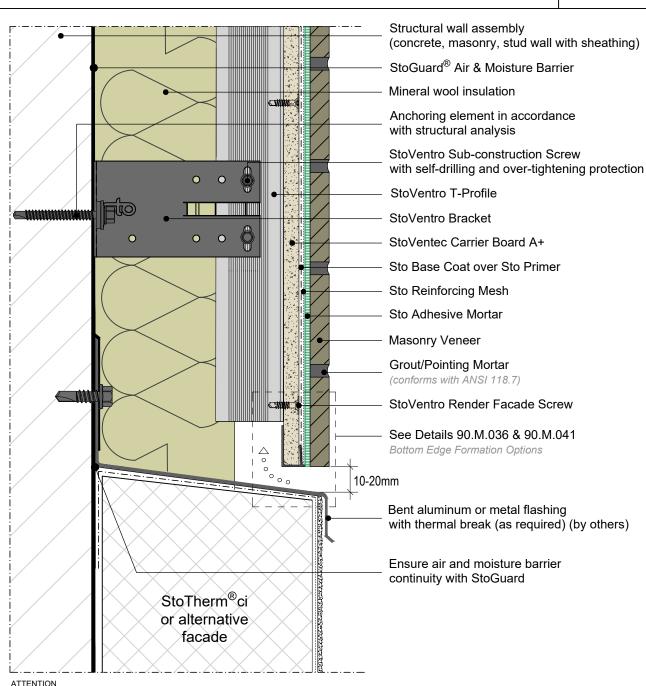
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Horizontal Transition of StoVentec above alternative facade (facades flush)

Date: June 2021

Detail No.: 90.M.478



ATTENTION

Section View

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StoVentec® for Masonry Veneer Facades

ATTENTION

Vertical Transition of StoVentec to Alternative Facade (StoVentec proud)

Plan View Detail No.: 90.M.486

Structural wall assembly (concrete, masonry, stud wall with sheathing) StoGuard® Air & Moisture Barrier Mineral wool insulation Anchoring element in accordance with structural analysis StoVentro T-Profile StoVentro Sub-construction Screw with self-drilling and over-tightening protection StoVentro Render Facade Screw Grout/Pointing Mortar (conforms with ANSI 118.7) StoVentro Bracket StoVentec Carrier Board A+ Sto Base Coat over Sto Primer Sto Reinforcing Mesh Sto Adhesive Mortar Masonry Veneer Ensure air and moisture barrier continuity with StoGuard Install Sto L-Profile with a max. installation length of 3m without torsional stress Sealant over half-round Backer Rod (by others) Sto Mesh Corner Bead Backer Rod and Sealant (by others) Sto Edge Protection Profile G StoTherm[®]ci or alternative facade

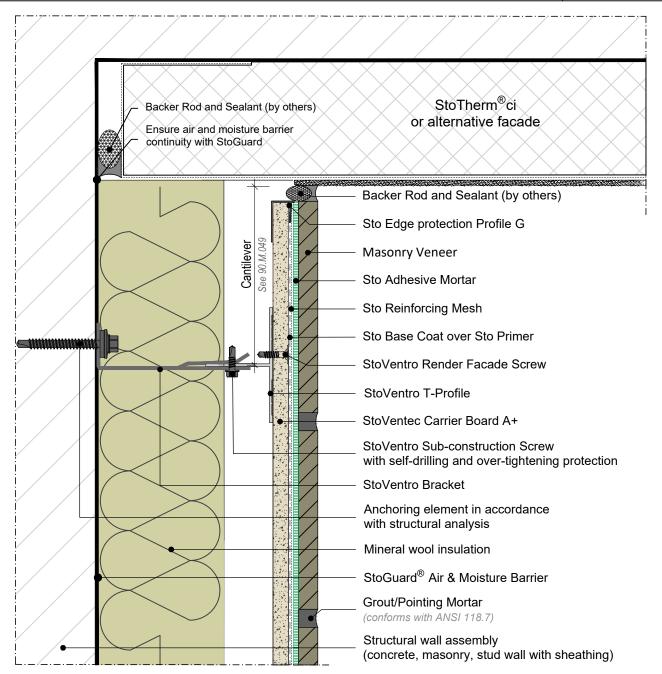
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Inside corner to alternative facade

Date: June 2021

Plan View Detail No.: 90.M.490



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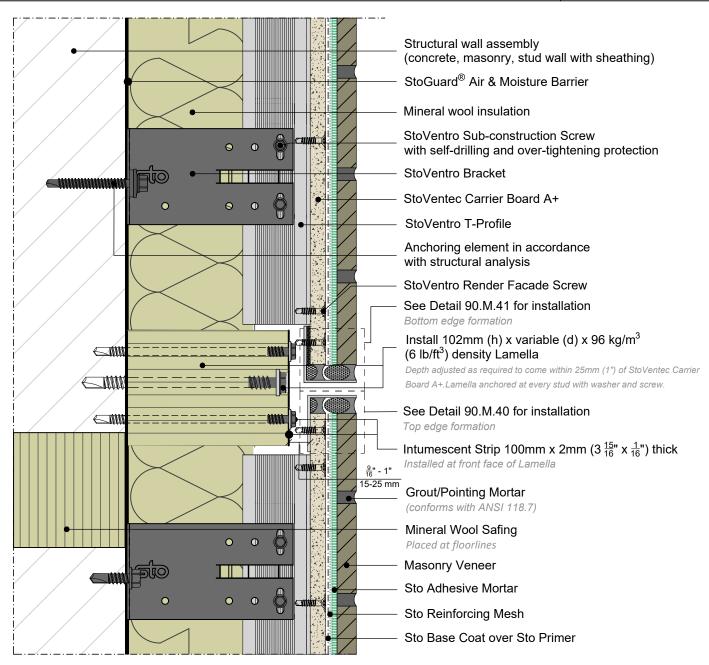


Fire Protection at Floor Lines with Lamella and Intumescent Tape Fire Break NFPA 285 Compliant, Intertek Design listing No. STO/CWP 30-02

Section View

Date: June 2021

Detail No.: 90.M.550



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