

Building with conscience.





Design Guide



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ATTENTION

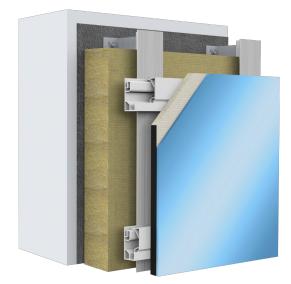
The final design of any project is the sole responsibility of the Design Professional, with considerations for compliance of local building and design codes and requirements. Sto Corp. accepts no liability for design, engineering, or workmanship of any project. The information provided herein is in addition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

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StoVentec® Glass

Ventilated Rainscreen® Wall System

StoVentec Glass is a drained and back-ventilated open joint rainscreen wall system fully warranted by a single source - Sto Corp.

The system consists of four principal components: an air and water-resistive barrier, an adjustable zinc-aluminum-magnesium coated steel and aluminum sub-construction, thermal insulation, and a prefabricated opaque glass panel assembly.

StoVentec Glass Panels are project-specific, customized pieces that are fully bonded to a carrier board to produce an inseparable composite panel. The panels are available in a variety of sizes and shapes, an impressive range of standard and custom colors, as well as direct to glass printing options. All colors and designs are fused into the glass so that the panels will not wear, scratch, fade or incur water damage.



Air and Water-Resistive Barrier

The first component of the StoVentec Glass system is Sto AirSeal®. It is a fluid-applied air and water-resistive barrier (AWRB) 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 AWRB continuity at joints, seams, wall penetrations, and across dissimilar materials. Sto AirSeal® features 500% tensile elongation, 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 barrier is specified. Alternatively, any of the StoGuard® family of AWRB systems may be utilized with tailored application quidelines.



StoVentro™ Sub-construction

The second component of the StoVentec Glass system is comprised of zinc-aluminum-magnesium coated steel wall brackets and aluminum vertical and horizontal support profiles. StoVentro sub-construction forms the structural link between the facade and the supporting wall construction. The corrosion resistant design absorbs wind and dead loads and transfers these loads to the supporting wall construction.

Zn-Al-Mg coated steel wall brackets provide superior strength and lower thermal conductivity, increasing thermal performance for a given insulation thickness. In some cases StoVentro sub-construction may allow less insulation thickness to meet energy code requirements. StoVentro brackets come in two sizes; large and small. They accommodate wall cavity depths of 25mm to 360mm (1" - $14-\frac{3}{16}$ "), with lengths in 20mm ($\frac{13}{16}$ ") increments.

StoVentro Sub-construction provides adjustability of the vertical wall glass panel assembly based upon the connection depth of the StoVentro 'T' or 'L' profiles with the wall brackets. This allows compensation for uneven substrates, and enables StoVentec Glass panel assemblies to be easily installed flush with surrounding claddings.



Thermal Insulation

The third component of the StoVentec Glass system is mineral wool thermal insulation board. The StoVentec Glass system uses ROCKWOOL Cavityrock® continuous insulation. This mineral wool board provides exceptional thermal insulation performance, fire resistive characteristics, acoustical control and moisture resistance. Cavityrock is an ASTM C612 Type IVB (CAN/ULC S-702, Type I) compliant, non-combustible mineral fiber board.



StoVentec[™] Glass Panel Assembly

The fourth component of the StoVentec Glass system is the exterior glass panel assembly. StoVentec Glass Panels are opaque glass-faced composite panels. The glass is fully bonded to a robust, lightweight StoVentec Carrier Board. StoVentec Glass Panel assemblies combine warmth and beauty with durability, hardness and weather resistance. They are factory made in accordance with project-specific shop drawings, and are delivered to the project site ready for installation. StoVentro Panel Carrier Profiles are factory-installed on the glass panel assemblies, and are easily hung onto their StoVentro Agraffe Profile counterparts located on StoVentro subconstruction. After installation, the glass panel assemblies can be quickly and easily leveled using the StoVentro Adjustment Screw, located on the top of the StoVentro Agraffe profile.



Figure 1.0

Sto AirSeal® Or any StoGuard Air and **Structural Wall Assembly** Water-Resistive Barrier **Mineral Wool** Concrete, Masonry, Stud Wall with Sheathing **Insulation Board** Thermal Insulation StoVentro™ T-Profile Sub-construction StoVentro[™] Adjustment Screw Glass Panel Assembly StoVentro™ **Sub-construction** Screw Sub-construction **Anchoring Element** Attached to Structural Wall StoVentec[™] **Glass Facade** StoVentro™ Bracket Glass Panel Assembly Sub-construction **Ventilation Cavity** StoVentro™ StoVentro™ StoVentec[™] Agraffe Profile **Panel Carrier Profile Carrier Board** Sub-construction Glass Panel Assembly Glass Panel Assembly

Glossary of Terms

StoGuard® Air & Water-Resistive Barrier - a liquid applied or selfadhered membrane air & water-resistive barrier available as a vaporpermeable or vapor-impermeable component.

Mineral Wool Insulation Board - ROCKWOOL Cavityrock® insulation provides thermal insulation, fire resistive characteristics, and acoustical control. (Not provided by Sto Corp.)

StoVentro[™] Sub-construction – Zn-Al-Mg-coated steel wall brackets with aluminum vertical and horizontal support profiles and Thermal Blocking Elements (not shown).

StoVentro™ Bracket – Adjustable corrosion-resistant steel support for vertical 'L' and 'T' profiles. Optional spring finger version shown.

StoVentro™ T-Profile – Vertical aluminum profile, attached to the wall brackets, which supports horizontal StoVentro[™] Agraffe profiles.

StoVentro™ Agraffe Profile – Horizontal profile attached to the vertical StoVentro[™] T-profile, which supports the StoVentec[™] Glass Panel assembly.

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

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

StoVentec[™] Glass Panel – comprised of the StoVentro[™] Panel Carrier Profile, StoVentec™ Carrier Board and StoVentec™ Glass Facade. The panel is prefabricated and ready for installation.

Ventilation Cavity – The circulating air layer between the Mineral Wool Insulation Board and StoVentec™ Glass Panel Assembly.

StoVentro™ Panel Carrier Profile – Horizontal profile that provides attachment of the glass panel assmembly to StoVentro™ Subconstruction.

StoVentec[™] Carrier Board – Lightweight composite board made of volcanic perlite or recycled glass granulate.

StoVentro™ Adjustment Screw – Stainless steel fastener that allows for leveling of StoVentec™ Glass Panel Assembly.

Sto Ventilation Profile – Perforated profile for drainage and ventilation. (Not shown)

StoVentro™ L-Profile – Aluminum support member used at inside and outside corners for structural attachment. (Not shown)

StoVentro™ Lintel Bracket - Bracket used for attachment of panels, metal trims and flashings to corners. (Not shown)

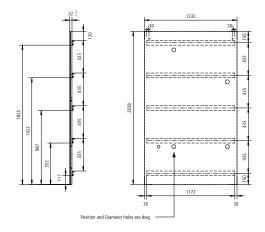


StoVentec Glass is tailor-made for each project to achieve a multitude of design aesthetics through custom shapes and colors. Similar to other prefabricated claddings suited for Class A buildings, careful advanced planning plus field measurements of as-built wall conditions are critically important. When SVG panels arrive at a jobsite, they are ready for installation, and, obviously, cannot be changed to mis-matching conditions in the field. As such, production drawings must account for the necessary real-world particulars. Correct dimensioning, pre-planned holes or special edge shapes accounting for penetrations for signage, conduits, and other small openings or features require precise detailed dimensioning and coordination between Sto and project teams.

Planning and Execution Checklist

- 1. Planned system depth(s) where does the surface of the glass need to be relative to the structural wall plane?
 - -Determine panel sizes accounting for perimeter and termination joints based on the dimensions of this outer surface plane.
- 2. Plumb and level wall surfaces
 - a. Laser scanning of existing building surfaces is recommended to find plane tolerances to aid in selecting the right StoVentro bracket size(s).
 - b. Mineral Wool continuous insulation thickness
 - Pair with brackets to create a minimum 20mm ventilation/air gap
 - c. StoVentro Bracket sizing and adjustability (refer to **Table 1**)
 -Bracket Extenders are available to help with
 wavy walls if needed
- 3. Perimeter open joint space between panels min. 10 mm (3/8")
 - a. Panel dimensioning/layout must account for all open joints b. In the event a panel needs to be removed and/or replaced, larger open joints (10-13mm+) provide more grace and flexibility for the installer.
 - c. Larger open joints allow installer flexibility when fitting panels in a given space to make slight adjustments in the reveal dimension to no less than 3/8 inch (10mm).
- 4. Choose SVG edge shape options for corners and openings
 - A, B, C, D see p.6 (and refer to details 90.G.410-413)
- 5. Signage, Penetrations, Special Edge Shapes Each project is unique as are signs and other attachments, so SVG must be crafted accordingly, on a case by case basis. SVG can be made with holes within the field of a panel and complex edge shapes for panels to fit around a larger penetration or complex feature. The most foolproof method for creating these special panels is to wait for real-world physical field verification to confirm the true dimensions and specs by which the SVG panels are manufactured. Short of this, precise detailing of the sign or other feature's specs must be finalized before SVG panel design and production. The manufacturability of the glass must always be reviewed in advance.

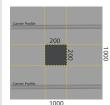
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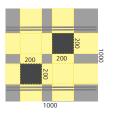
Signage/Penetrations - Holes for signage supports and electrical wiring can be manufactured into SVG panels. Inner radii of glass cut-outs are at least 12mm. Correct placement and dimensions must be coordinated with sign suppliers and installers prior to production. Placement of Carrier Profiles (preattached to SVG during production) and Agraffes (field installed) must be taken into account in positioning holes for signage or other penetrations. Signs on top of SVG require their own structural supports, not relying on the glass to hold mass and resist loading.



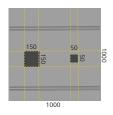
Edge distance rule: Holes must be positioned a distance at least 2x the diameter of the hole from the panel edge.



Cut-out sizing: A single cut-out of up to 20% of the respective panel edge length is possible without further constructive measures as long as the cut-out does not conflict with the Carrier Profiles.



Additional cut-outs of up to 20% of the respective panel edge length are possible as long as they do not occur in the same stress range (represented with yellow shaded areas/dashed lines).



Two or more cut-outs may occur in the same stress ranges only if they cumulatively do not exceed 20% of the respective panel edge length.

During the fabrication drawing process, Sto will review and advise regarding all of the above.



6. Field Verification -

- A. Structural Substrate and/or Sub-Construction Verification
 - Confirm that substrates and structures/sub-framing are level, plumb, square, and within industry tolerances before measuring for glass panels (1/4 inch in 10 feet (6mm in 3.0m))
 - Verify that deflection limits (L/300 for StoVentec® Glass) are not exceeded; excessive movement will affect panel fit
- B. Actual Field Measurements vs. Drawings

There will be two types of drawings that can be used for field verification:

- •Shop Drawings: created in an early stage, made after and in keeping with a complete architectural set of drawings and must be approved prior to production drawings. Shop drawings depict the glass layout and sub-structure installation methods based on engineering calculations
- Production drawings: the set of drawings made by the glass manufacturer and created following shop drawings approval. These drawings reflect exactly how the glass will be fabricated: sizes, shapes, edges, etc. Both sets of drawings must be approved prior to initiation of the glass manufacturing process

For field measurements, two situations may exist at the job site:

- \bullet StoVentro $^{\scriptscriptstyle\mathsf{TM}}$ Sub-Construction is installed and ready for verification, or
- StoVentro™ Sub-Construction cannot be installed at the time field verification for the glass panels is required

Field Verification Situation One: StoVentro Sub-Construction Installed Do not rely solely on drawings. With StoVentro already installed, take precise, final field measurements:

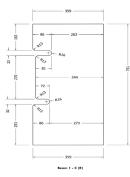
- Identify any variation from design intent
- Verify actual dimensions between key structural supports
- Confirm horizontal and vertical spacing between bracket centers
- Check plumbness of the vertical StoVentro T-Rails
- Confirm true squareness and flatness of framing planes using lasers or string-lines

Create a template to replicate an SVG panel and use to verify accuracy of the installed sub-construction:

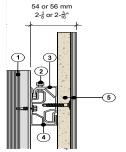
- •Use the whole glass assembly thickness (see SVG Assembly Depth) as a base measure to start field verification of the key points. Verify assembly thickness in the shop drawings.
- Using the benchmark provided by the general contractor, identify the bottom and top heights from where the panels will be installed accounting for minimum clearances
- Make marks on the vertical T-profiles where the glass should be installed and verify accuracy in the total span of the wall (vertically and horizontally). Include verification that panel joint widths (minimum 10mm (3/8") are correctly located and dimensioned per design intent
- Corners: verify using the template that corners and cantilevers meet the specified details and are within Sto tolerances. See for reference details 90.G.410, 411, 412, & 413
- Consider in your measurement any penetrations that intersect the glass panel layout

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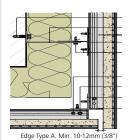


Special Edge Shapes - SVG panel edges can be custom-made to fit around small objects, large penetrations, openings, and design or structural features. In the above example, SVG panels were fabricated to fit around decorative I-beams. Confirmed physical measurements of I-beam positioning and dimensions were prerequisite to correct SVG fabrication.



SVG Assembly Depth

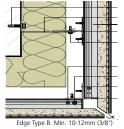
From the face of the vertical T-Rails to the face of the glass: 54mm (2-1/8") w/ 6mm glass 56mm (2-3/16") w/ 8mm glass (Carrier Board Hydro 15mm thickness)

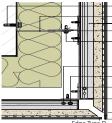


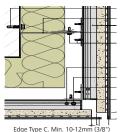
SVG Joint Width

Account for min. 10-12mm (3/8") gaps between SVG panels when dimensioning panel sizes and confirming layouts.

There are four distinct edge types: A, B, C, D.









Field Verification Situation Two: StoVentro Sub-Construction NOT Installed

If the StoVentro material has not yet been installed, the best approach for field verification is make a template of the total wall assembly that will include: StoVentro Brackets, T-Profiles, and Agraffe Rails and glass panel mockup template(s). The wall assembly information should be depicted in the shop drawings or can be provided by Sto. Install several templates at key points on the wall to ensure accurate verification of the glass dimensions for manufacturing.

If the project is still under construction but there is the need to start glass manufacturing, it is crucial to notify the design team, Sto rep., facade consultant (if applicable), and general contractor that field verification cannot be performed without StoVentro installation. Any glass fabrication done at this phase will be based on theoretical measurements, increasing risk of misfit. The general contractor must ensure that the construction is done to exact specifications to guarantee that the glass will fit properly with future as-built conditions.

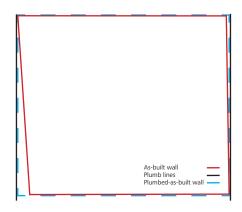
General notes:

These described methods are not the only acceptable verification options. Situations differ between projects and installer experience and discretion is needed to address the specific requirements of the job. Regardless of the verification method used, the main goal is to ensure accurate field verification prior to the fabrication and installation of StoVentec Glass systems. Deficiencies or abnormalities in the substrate and the methods to correct them will not be incorporated into the glass Shop Drawings apart from situations such as a full elevation adjustment or variation from the rest of the project. Field verification allows for greater confidence in approved production drawings.

Besides the manual field verification methods, including the use of laser levels, chalk lines, strings, and tape measures, to physically mark, measure, and verify bracket locations and facade alignment against approved design drawings, there are other reliable measurement tools, methods, and services that can be adjusted to the project requirements and utilized by the site team:

- •Laser distance meters for capturing bracket-to-bracket distances, offsets, and key dimensions with high precision and digital documentation
- Layout systems for projecting and verifying fixing locations directly from CAD or BIM models, enabling precise onsite layout and verification without requiring specialist survey personnel
- Scanning applications to generate 3D scans of the facade surface, providing a digital as-built reference for dimensional verification
- Engaging a qualified third-party surveying or facade verification company to perform independent field measurement, using advanced tools such as 3D laser scanners, total stations, or photogrammetry to validate as-built conditions with professional oversight

All measurement data, whether obtained by the site team or a third-party specialist, should be thoroughly documented, reviewed, and cross-checked against approved shop drawings before releasing materials for fabrication. Utilizing a combination of advanced digital tools, traditional manual methods, and, where appropriate, third-party verification services will help ensure alignment between actual site conditions and design intent, reducing the risk of dimensional discrepancies, installation conflicts, and costly rework or project delays.



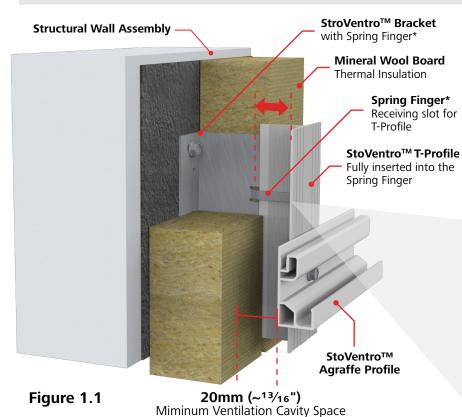
Situation Two - Next Steps: Plumbed-As-Built Digital Twin

If the structure's exterior is framed and sheathed, obtain plumbed-as-built dimensions in order to draw an as-built digital twin model, corrected to plumb. Drop plumb lines at each corner, or use laser scanning, to dimension each wall as it should be if perfectly plumb and square. Couple this data with measurements obtained via the physical mockup templates to draw and dimension the StoVentec Glass panels, accounting for the depth of the sub-construction, the panel assembly system thickness, and joint spacing (10mm (3/8 in.) or more) to lay out the glass at the desired final surface plane.



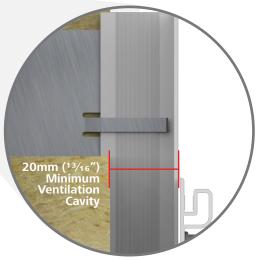






Minimum Ventilation Cavity

The vertical support profile (StoVentro T-Profile) is fully inserted into the StoVentro Bracket Spring Finger* (optional version of StoVentro). This configuration represents the minimum ventilation cavity space of 20mm (13/16"). This ventilation cavity is measured from the exposed side of the Mineral Wool Insulation board to the attachment plane of the StoVentro Agraffe Profile.



Structural Wall Assembly StroVentro™ Bracket with Spring Finger* Mineral Wool Board Thermal Insulation Spring Finger* Receiving slot for T-Profile Min. insertion into the Spring Finger

StoVentro™ Agraffe Profile

Maximum Ventilation Cavity

The vertical support profile (StoVentro T-Profile) is minimally inserted within the StoVentro Bracket Spring Finger* (optional version of StoVentro). This configuration represents the maximum ventilation cavity space of 50mm (~2"). This ventilation cavity is measured from the exposed side of the Mineral Wool Insulation board to the attachment plane of the StoVentro Agraffe Profile.

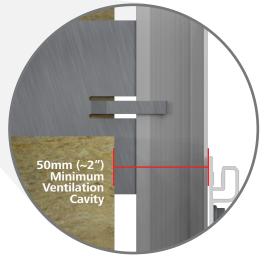


Figure 1.2 50mm (~2")
Miminum Ventilation Cavity Space



Table 1.0 - Bracket Size and System Depth*

	Insulation⁴ Size		Sto Wall Bracket Size Required*	- Minimum - Distance from AWRB ³ to Face of Sto Glass Panel	- Minimum - Distance from AWRB ³ to Face of Sto Glass Panel	- Maximum - Distance from AWRB ³ to Face of Sto Glass Panel Assem-	- Maximum - Distance from AWRB ³ to Face of Sto Glass Panel		
	Width (in)	Width (mm)	R-Value ¹	RSI-Value ²	(mm)	Assembly⁵ (mm)	Assembly⁵ (in)	bly⁵ (mm)	Assembly⁵ (in)
	1"	25.4	4.3	.75	60	116.7	4-5/8"	146.7	5-3/4"
	2"	50.8	8.6	1.48	80	136.7	5 -3/8"	166.7	6 -9/16"
	2.5"	63.5	10.7	1.85	100	156.7	6 -3/16"	186.7	7 -3/8"
	3"	76.2	12.9	2.22	100	156.7	6 -3/16"	186.7	7-3/8"
	3.5"	88.9	15	2.59	120	176.7	6 - ¹⁵ / ₁₆ "	206.7	8 -1/8"
rd	4"	101.6	17.2	2.96	120	176.7	6 -15/16"	206.7	8 -1/8"
Standard	4.5"	114.3	19.3	3.33	140	196.7	7 -3/4"	226.7	8 -15/16"
Sta	5"	127	21.5	3.7	160	216.7	8 -9/16"	246.7	9-11/16"
	5.5"	139.7	23.6	4.07	160	216.7	8 -9/16"	246.7	9-11/16"
	6"	152.4	25.8	4.44	180	236.7	9 -5/16"	266.7	10 -7/16"
	6.5"	165.1	27.9	4.81	200	256.7	10 -1/8"	286.7	11 -1/4"
	7"	177.8	30.1	5.18	200	256.7	10 -1/8"	286.7	11 -1/4"
	8"	203.2	34.4	5.92	220	276.7	11 -3/16"	306.7	12 -1/16"
D	8.5"	215.9	36.5	6.29	240	296.7	11-11/16"	326.7	12 -7/8"
luire	9"	228.6	38.7	6.66	260	316.7	12 -7/16"	346.7	13 -5/8"
Rec	9.5"	241.3	40.8	7.03	260	316.7	12 -7/16"	346.7	13 -5/8"
ons	10"	254	43	7.4	280	336.7	13 -1/4"	366.7	14 -7/16"
rati	10.5"	266.7	45.1	7.77	300	356.7	14 -1/16"	386.7	15 -1/4"
side	11"	279.4	47.3	8.14	300	356.7	14 -1/16"	386.7	15 -1/4"
Con	11.5"	292.1	49.4	8.51	320	376.7	14 - ¹³ / ₁₆ "	406.7	16"
sign	12"	304.8	51.6	8.88	320	376.7	14 - ¹³ /16"	406.7	16"
Special Design Considerations Required	12.5"	317.5	53.7	9.25	340	396.7	15 - ⁵ /8"	426.7	16 - ¹³ / ₁₆ "
ecia	13"	330.2	55.9	9.62	360	416.7	16 -3/8"	446.7	17 -9/16"
Sp	13.5"	342.9	58	9.99	360	416.7	16 -3/8"	446.7	17 -9/16"

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

ch ³ AWRB = Air and Water-Resistive Barrier Layer

⁴ ROCKWOOL Cavityrock®

² RSI = 0.74 per 25mm ⁵ SVG with 15mm Carrier Board Hydro and 6mm glass - if using 8mm glass or 20mm thick Carrier Board A+ adjust accordingly.

^{*25} and 40mm brackets are also available if no insulation is required.



Table 1.1 - System Information

Feature	Description	Value
Application	Approved for vertical walls and soffits	Above grade only, exterior and interior.
Warranty	Limited Warranty	10 Year
System Weight	Weight: 6 mm glass panel assembly	27 kg/m² (~ 5.53 lb./ft²)
System Weight	Weight: 8 mm glass panel assembly	32 kg/m² (~ 6.55 lb./ft²)
System Weight	Weight of StoVentro Sub-construction for 6mm glass panel assembly (nominal, will vary with glass panel configuration and sub-construction spacing as dictated by wind loading)	2.00 kg/m² (0.41 lb./ft²)
System Weight	Weight of StoVentro Sub-construction for 8mm glass panel assembly (nominal, will vary with glass panel configuration and sub-construction spacing as dictated by wind loading)	4.00 kg/m² (0.82 lb./ft²)
System Layout	Gap between adjacent glass panels	10-13mm (¾8"- 1/2") (minimum)
System Layout	Gap between glass panel and other building elements (flashing, other claddings, etc.)	10mm (¾") (minimum)
System Layout	StoVentec Glass panel assembly clearance above ground level	150mm (5 -7/8") (minimum)
System Layout	StoVentec Glass panel assembly setback distance of glass from ground objects	At ground level, recommended 914.4mm (3') minimum setback allowance for protection against inadvertent impact, snow accumulation, debris build-up, etc.
System Layout	Quantity of fixed point (FP) connections to T/L profile	1 maximum
System Layout	Quantity of sliding point connections to T/L profile	At least one sliding point bracket is required. Actual quantity is defined by project-specific engineering.
System Layout	Quantity of horizonal StoVentro Agraffe profiles per glass panel assembly	2 min., 6 max., based upon glass panel assembly size, orientation (portrait or landscape), and wind loading.
System Layout	Maximum cantilever of glass panel assembly vertical edge past vertical StoVentro T or L profile	280mm (11")
System Layout	Maximum cantilever of glass panel assembly horizontal edge beyond horizontal StoVentro Agraffe profile	150mm, 200mm , 250mm, or 300mm (5-7/8", 7-7/8", 9-3/16", 11-13/16") See StoVentec Glass Details
System Layout	Use of ventilation profiles	Ventilation profiles are required at top and bottom of glass panel assembly to prevent bird, animal, bug entry and debris build-up within the ventilation cavity.
Substrates	Allowable wall substrates	Metal or wood studs with exterior sheathing, masonry, core-filled CMU. For others, contact Sto Corp.
Substrate	Stud spacing for wall bracket mounting	16" o.c. (400 mm), 24" o.c. (600 mm), 32"o.c. (813mm), 48"o.c. (1219mm), depending upon wind loading.
Ventilation Cavity	Thickness of unobstructed air cavity between face of wall mounted insulation and attachment plane of StoVentro Agraffe profile	20 - 50mm (¹³/16"- 2")
Sub-Construction	Bracket sizing	Bracket required to extend past face of insulation by 20 mm (13/16") to ensure minimum ventilation cavity space.
Sub-Construction	Bracket type Width of Attachment x Flange x Height	Two types exist: small and large with substrate mounting footprints of 50mm x 75mm (2" x $2^{-15/16}$ ") and 50mm x 130mm (2" x $5^{-1/8}$ ") respectively.
Sub-Construction	Adjustability	Connection of T/L profiles to brackets allows for 30mm (1-3/16") of adjustability
Sub-Construction	Attachment locations of StoVentro T/L profiles to StoVentro Wall Brackets	To compensate for linear thermal expansion of T/L profiles, attach profiles to StoVentro Brackets through 5.5 x 20 mm oblong slots in bracket. This is referred to as a sliding point attachment.



Table 1.1 - System Information (cont'd)

Feature	Description	Value
Sub-Construction	Attachment locations of StoVentro T/L profiles to StoVentro Wall Brackets	For dead loads, attach T/L profiles to the StoVentro Wall bracket through circular holes in bracket. This is referred to as a "fixed point" (FP) attachment.
Sub-Construction	Attachment locations of horizontal StoVentro Agraffe profile to StoVentro T/L profile	5.5mm x 20mm (¾16" x 1¾16") oblong slots are required to be added to StoVentro Agraffe profiles for mounting to T/L profiles to compensate for linear thermal expansion.
Sub-Construction	Recommended spacing between horizontal, end-to-end mounted StoVentro Agraffe profiles	10mm - 15 mm (¾s" - ½s")
Sub-Construction	Recommended spacing between of adjacent vertical, end-to- end mounted StoVentro T/L profiles	10mm - 15 mm(3/8" - 5/8")
Sub-Construction	Maximum spacing of vertical mounted StoVentro T/L profiles	1219 mm (48")
Sub-Construction	Use of StoVentro Lintel brackets	Required for use at lintels and corners.
Deflection Limit	Recommended allowable deflection limit (varies by glass panel assembly size)	L/300
Fire Break	Required (Horizontal)	Refer to StoVentec Details for material and configuration.
Flashing	Recommended	Refer to StoVentec Details for material and configuration.
Panel Adjustment	Vertical adjustment of glass panel assembly after installation (leveling)	+/- 3 mm (~³/₃₂″)
Panel Retention	Elimination of lateral drift of glass panel assembly on wall mounted StoVentro Agraffe profile	Use of cotter pin (for ease of glass panel assembly maintenance/ removal) or self drilling fastener.



Table 1.2 - Component Information

Feature	Description	Value
AWRB	StoGuard® Air and Water-Resistive Barrier (AWRB)	Vapor permeable or impermeable per project specific requirement as manufactured by Sto Corp.
Insulation	Type, mineral wool	ASTM C612 (CAN/ULC S-702, Type I) compliant, non-combustible mineral fiber board classified into types and categories: Type IA, IB, IVA, IVB.
Insulation	Thickness	50mm (2") minimum (for NFPA 285, CAN/ULC-S134 compliance)
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
Glass	Weight: 6 mm glass panel assembly (standard)	27 kg/m² (~ 5.53 lb./ft²)
Glass	Weight: 8 mm glass panel assembly (required for larger glass sizes and high load conditions)	32 kg/m² (~ 6.55 lb./ft²)
Glass	Thickness: 6mm glass (standard)	6 mm (1/4")
Glass	Thickness: 8mm glass (required for larger glass sizes and high load conditions)	8 mm (5/16")
Glass	Thickness: total panel assembly (6mm glass) without: with integral StoVentro Carrier Profile	22 : 54 mm (7/8" - 2 1/8")
Glass	Thickness: total panel assembly (8mm glass) without: with integral StoVentro Carrier Profile	24 : 56 mm (15/16" - 2 3/16")
Glass	Minimum glass panel assembly size, width by height	100mm x 250mm (3-15/16" - 9 13/16") (portrait orientation) 250mm x 175mm (9-13/16" - 6 7/8") (landscape orientation)
Glass	Nominal aspect ratio, glass panel assembly, width: height	1:12
Glass	Max height, portrait orientation, rectangle shape of 6mm glass panel assembly: widths of 100 mm - 1500 mm	2800 mm (9' 2-1/4")
Glass	Max height, landscape orientation, rectangle shape of 6mm glass panel assembly widths of 100 mm - 2800 mm	1500 mm (4′ 11-1/16″)
Glass	Max height, portrait orientation, rectangle shape of 8mm glass panel assembly: widths of 100 mm - 1250 mm	4500 mm (14' 9-3/16")
Glass	Max height, portrait orientation, rectangle shape of 8mm glass panel assembly: widths of 1251 mm - 1500 mm	3750 mm (12' 3-5/8")
Glass	Max height, landscape orientation, rectangle shape of 8mm glass panel assembly: widths of 100 mm - 3750 mm	1500 mm (4′ 11-1/16″)
Glass	Max height, portrait orientation, "near-square" shape of 6mm and 8mm glass panel assembly: widths of 100 mm - 2150 mm	2600 mm (8′ 6-3/8″)
Glass	Colors: Number of standard RAL	63, others upon request, contact Sto Corp.
Glass	Option: Low iron white glass	Standard is "green glass"



Table 1.2 - Component Information (cont'd)

Feature	Description	Value
Glass	Option: Digital and Silkscreen printing	High resolution image format required: tiff, bmp, jpeg vector graphic: pdf, ps, eps, eps, ai
Glass	Option: Digital and Silkscreen printing	Standard is non-reflective
Glass	Option: Reflective coating (metal oxide coating on front face)	Standard is non-reflective
Glass	Option: Acid etched (matte finish)	Standard is gloss
Glass	Option: Non-square and non-rectangular shapes	Contact Sto Corp. for non-standard shapes.
Glass	Option: Holes and internal cut-outs	Hole diameter ≥ glass thickness, contact Sto Corp. for other size requirements.
Glass	Option: Edge condition of integral StoVentec Carrier Board (back-up structure for glass)	Square edge, 45° angle
Glass	Option: Glass overhang beyond integral StoVentec Carrier Board back-up structure	25 mm (1")
Glass	Option: Metal trimmed/framed glass panels	Contact Sto Corp.



Table 1.3 - Sub-Construction Information

Feature	Description	Value
Brackets	Material	Zn-Al-Mg coated steel
Brackets	Small StoVentro Bracket (GP) W x H x T ¹	50mm x 75mm x 2.0mm x variable depth (2"x 2-15/16" x 1/16")
Brackets	Large StoVentro Bracket (FP) W x H x T ¹	50mm x 130mm x 2.0mm x variable depth (2"x 5-1/8" x 1/16")
Brackets	Depth range	25mm - 360mm (1" x 14 - 1/8")
Brackets	Adjustability depth range	0mm - 30mm (0" x 1 - ³ / ₁₆ ")
Brackets	Weight	Variable by size
Rails	Material (StoVentro Agraffe profiles)	6063-T66 or 6005A-T5
Rails	Material (StoVentro L & T profile)	6063-T66 or 6005A-T5
Rails	Size: StoVentro T-profile (3m length)	90mm x 53mm x 2.7mm (3 -9/16" x 2 -1/16" x 1/8")
Rails	Size: StoVentro L-profile (3 m length)	50mm x 40mm x 2.7mm (2" x 1 -9/16" x 1/8")
Rails	Size: StoVentro Agraffe profile (3m length)	31mm x 65mm x 3.0mm (1 -1/4" x 2 -9/16" x 1/8")
Rails	Weight/ft : StoVentro L-profile (approximate)	1.61 kg/m (0.33 lb./ft)
Rails	Weight/ft : StoVentro T-profile (approximate)	2.64 kg/m (0.54 lb./ft)
Rails	Weight/ft : StoVentro T-profile (approximate)	3.52 kg/m (0.72 lb./ft)
Fastener	Bracket to StoVentro T/L profile attachment	Hex Head, Self drilling screw, 5.5mm Dia x 22mm L, with over torque feature, 304 SS. (3/16" x 7/8")
Fastener	StoVentro Agraffe profile to StoVentro T/L profile attachment	Hex Head, Self drilling screw, 5.5 mm Dia x 22 mm L, with over torque feature, 304 SS. $(\frac{3}{16}$ " x $\frac{7}{8}$ ")
Fastener	StoVentec Glass Panel assembly vertical adjustment	Socket Head, Internal Hex Drive Screw, M6 x 10 mm L, 304 SS
Fastener	Bracket to substrate attachment fastener (anchoring fastener). Calculations performed by qualified licensed engineer.	Project specific based on wind load, and substrate material, defined by structural calculations, material: 304 stainless steel

¹ Width of Attachment Flange x Bracket Height x Thickness



Table 1.4 - Testing & Listing Information

Feature	Description	Value	Rating
Listing	General U.S. Building Code Compliance w/ 3rd party quality assurance program	DrJ TER 2312-07	Compliant
Listing	Fire Spread	NFPA 285, STO/CWP-30-02, CSI 07 02 43, Composite Wall Panels, 11/8/2019	Compliant
Listing	Fire Spread	CAN / ULC S134, STO/CWP 25-01, CSI 07 02 43, Composite Wall Panels, 11/8/2019. meets Article 3.1.5.5 of NBCC	Compliant
Listing	National Technical Approval/Structural Design Type Approval for Ventilated External Wall or Ceiling Cladding (Germany)	DIBt Z-10.3-720 Validity period 8/23/2018 - 8/23/2023	Compliant
Listing	Technical Approvals for Construction, UK	BBA, certificate 10/4792, dated 11/23/2010 and 6/28/2012	Compliant
Test	Fire Resistance of Wall Assemblies	Engineering Judgement, Jensen Hughes Fire Protection Consultants. No. 1JJB05184.001	Maintain fire resistance rating
Test	Water Penetration Resistance	AAMA 509, water penetration	Class W1
Test	Ventilation	AAMA 509, ventilation	Class V2
Test	Wind Load Resistance	ASTM E330	Ultimate load up to -288 lb/ft2 (-13.8 kN/m2)
Test	Wind Load Resistance	DIBt Z-10.3-720 Validity period 8/23/2018 - 8/23/2023	See documents for specific ratings
Test	Thermal toughened safety glass (Heat Soak Tested)	EN 14179	Compliant
Test	Adhesion of StoVentec Glass Panel assembly	DIN 18156-2, section 2.2.1.5	≥ 36 psi (0.25 N/mm2)
Test	Smoke Emission Test	BS 6853	Compliant
Test	Hard Body Impact Test	BS 8200, solid steel ball of 62.5mm diameter and mass of 1 kg	Compliant Category B
Test	Soft Body Impact Test	BS 6206, soft bag with mass of 45 kg @ 3m suspension	Compliant Category A
Test	Soft Body Impact Test	BS 12600, tire of 50 kg	Compliant, Class 1
Test	Soft Body Impact Test	BS 8200, soft bag of 400 mm diameter and mass of 50 kg @ 3m suspension	Compliant Category B
Test	Drop Ball Test	BS EN 356, with steel ball of 100 mm diameter and mass of 4.1 kg	Compliant, Class P2A, P3A, P4A
Test	Bomb Blast Test	ISO 16933, 10 kg of TNT @ 6m, 100 kg of TNT @ 15m and 25m	Compliant
Test	Seismic Test	CSTB, Marne-La-Valee, France, Test Report EEM 10 26030315, Eurocode 8, PS 92, 8 test phases, 30 cycles/phase, 2 - 15 Hz	No damage observed



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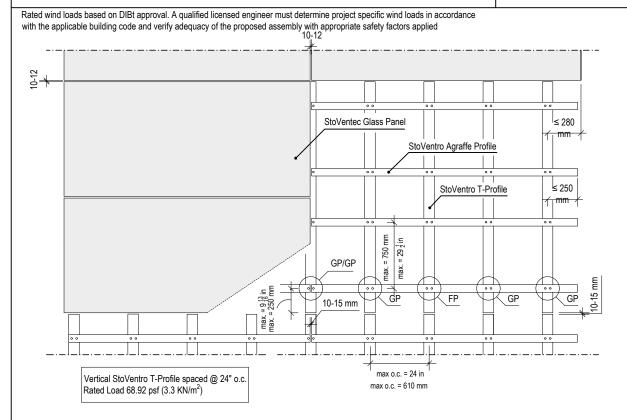
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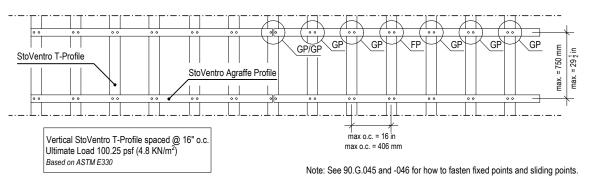


Landscape Panel Installation, Vertical StoVentro[™] T-Profile spacing, 16" o.c. & 24" o.c. Vertical Glass Panel edge, supported by StoVentro T-Profile **Elevation View**

Date: March 2020

Detail No.: 90.G.001





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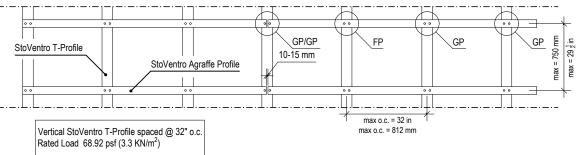


Landscape Panel Installation, Vertical StoVentro[™] T-Profile spacing, 32" o.c. & 48" o.c. Vertical Glass Panel edge, supported by StoVentro[™] T-Profile **Elevation View**

Date: March 2020

Detail No.: 90.G.002

Rated wind loads based on DIBt approval. A qualified licensed engineer must determine project specific wind loads in accordance with the applicable building code and verify adequacy of the proposed assembly with appropriate safety factors applied 10-12 StoVentec Glass Panel [']≤ 280 StoVentro Agraffe Profile StoVentro T-Profile 250 mm = $29\frac{1}{2}$ in max. = 750 GP/GP FP GP max. = 250 10-15 mm max. max o.c. = 48 in Vertical StoVentro T-Profile spaced @ 48" o.c. Rated Load 50.13 psf (2.4 KN/m²) max o.c. = 1219 mm



Note: See 90.G.045 and -046 for how to fasten fixed points and sliding points.

ATTENTION

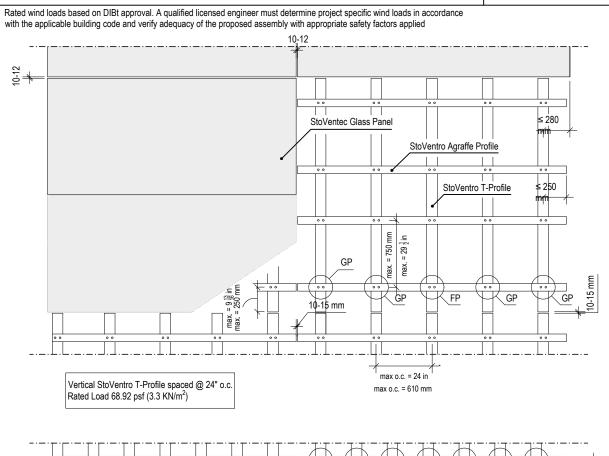
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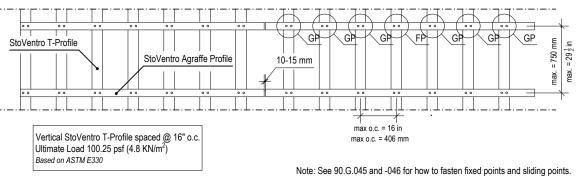


Landscape Panel Installation, Vertical StoVentro[™] T-Profile spacing, 16" o.c. & 24" o.c. Vertical Glass Panel edge, cantilevered over StoVentro[™] T-Profile **Elevation View**

Date: March 2020

Detail No.: 90.G.003





ATTENTION

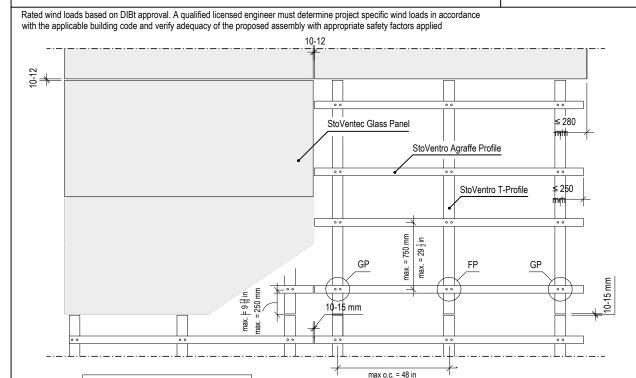
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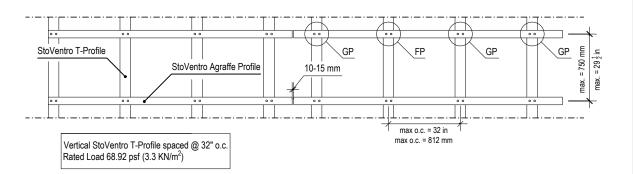


Landscape Panel Installation, Vertical StoVentro[™] T-Profile spacing, 32" o.c. & 48" o.c. Vertical Glass Panel edge, cantilevered over StoVentro[™] T-Profile **Elevation View**

Date: March 2020

Detail No.: 90.G.004





max o.c. = 1219 mm

ATTENTION

Vertical StoVentro T-Profile spaced @ 48" o.c.

Rated Load 50.13 psf (2.4 KN/m²)

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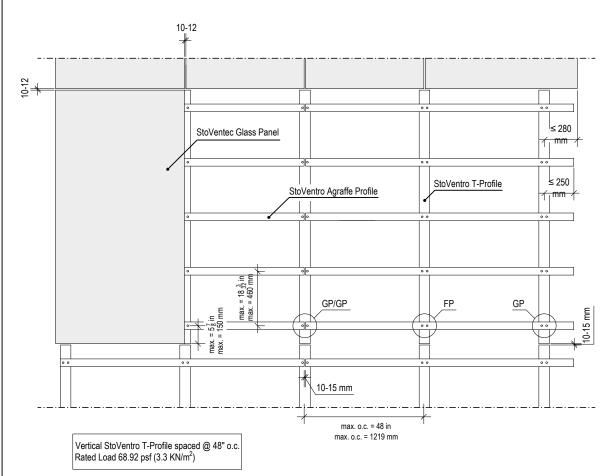
Portrait Panel Installation, StoVentro[™] Vertical T-Profile spacing 48" o.c. (1219 mm), Horizontal StoVentro[™] Agraffe spacing 460mm. Vertical StoVentec[™] Glass Panel edge supported by StoVentro[™] T-Profile

Detail No.: 90.G.005

Date: March 2020

Elevation View

Rated wind loads based on DIBt approval. A qualified licensed engineer must determine project specific wind loads in accordance with the applicable building code and verify adequacy of the proposed assembly with appropriate safety factors applied



Note: See 90.G.045 and -046 for how to fasten fixed points and sliding points.

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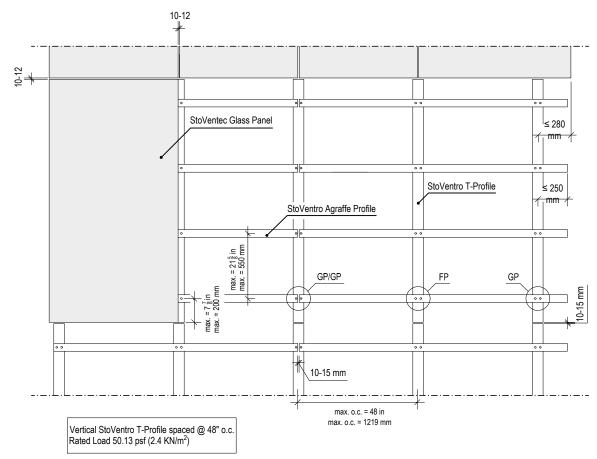
Portrait Panel Installation, StoVentro[™] Vertical T-Profile spacing 48" o.c. (1219 mm), Horizontal StoVentro[™] Agraffe spacing 550mm. Vertical StoVentec[™] Glass Panel edge supported by StoVentro[™] T-Profile

Detail No.: 90.G.006

Date: March 2020

Elevation View

Rated wind loads based on DIBt approval. A qualified licensed engineer must determine project specific wind loads in accordance with the applicable building code and verify adequacy of the proposed assembly with appropriate safety factors applied



Note: See 90.G.045 and -046 for how to fasten fixed points and sliding points.

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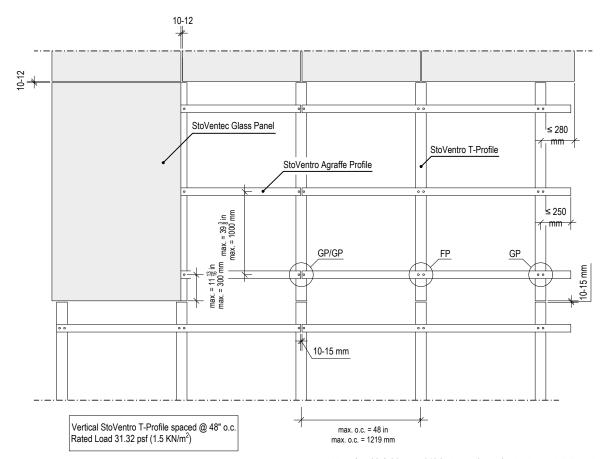
Portrait Panel Installation, StoVentro[™] Vertical T-Profile spacing 48" o.c. (1219 mm), Horizontal StoVentro[™] Agraffe spacing 1000mm. Vertical StoVentec[™] Glass Panel edge supported by StoVentro[™] T-Profile

Date: March 2020

Elevation View

Detail No.: 90.G.007

Rated wind loads based on DIBt approval. A qualified licensed engineer must determine project specific wind loads in accordance with the applicable building code and verify adequacy of the proposed assembly with appropriate safety factors applied



Note: See 90.G.045 and -046 for how to fasten fixed points and sliding points.

ATTENTION

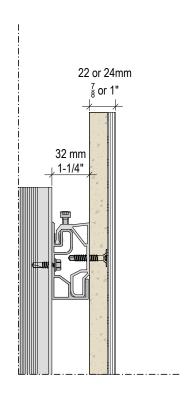
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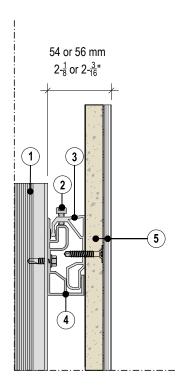


StoVentro[™] Carrier Profile + Agraffe Profile, System Depth **Section View**

Date: May 2025

Detail No.: 90.G.010





- StoVentro[™] T-Profile (fastening flange 2.7mm thick)
- ② StoVentro[™] Adjustment Screw (M5 x 10)
- ③ StoVentro[™] Panel Carrier Profile (attached to SVG in factory)
- StoVentro[™] Agraffe Profile
- (5) StoVentec[™] Glass Panel 15mm Carrier Board Hydro, 1mm adhesive, plus 6 or 8mm safety glass

Refer to Table 1 in the SVG Design Guide for full system depth ranges inclusive of StoVentro Brackets and the parts listed above.

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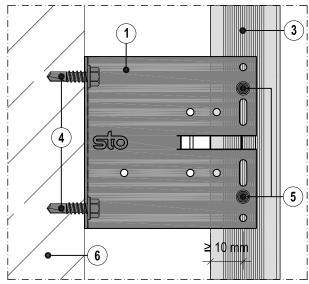


StoVentec™ Glass

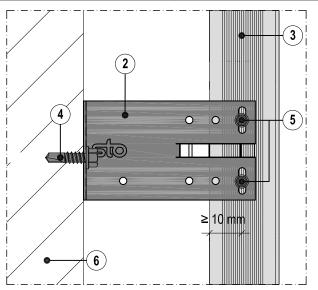
StoVentro™ Brackets - Large (FP) and Small (GP), with attachment locations for fixed points and sliding points Section View

Date: March 2020

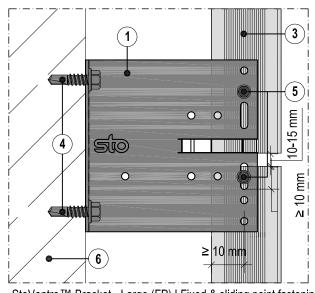
Detail No.: 90.G.045



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



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



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

4 4 5 10 mm 6

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

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

ATTENTION

Note: All values are subject to structural analysis.

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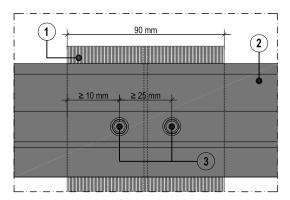
StoVentro™ Agraffe Profile attachment locations

Fixed points and sliding points

Elevation & Section Views

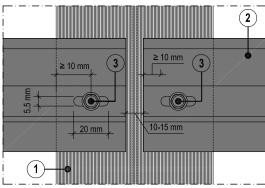
Date: March 2020

Detail No.: 90.G.046



2

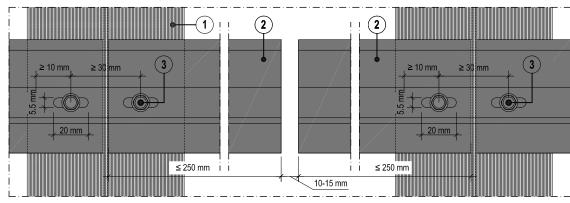
fixed point



2 10 mm ≥ 30 mm 3 20 mm

sliding point / sliding point

sliding point



sliding point / sliding point

- (1) StoVentro™ T-Profile
- **2** StoVentro™ Agraffe Profile
- ③ StoVentro™ Sub-construction Screw with self-drilling and over-tightening protection (5.5 x 22 mm)

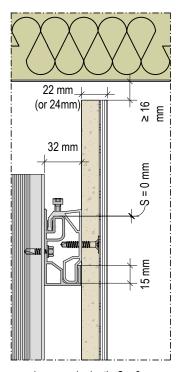
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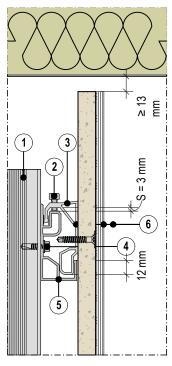


StoVentro[™] Agraffe Profile, Adjustment Tolerances

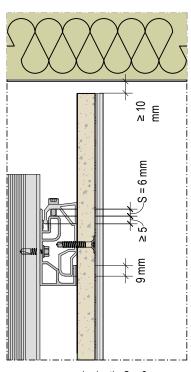
Section View Detail No.: 90.G.047



min. screw-in depth: S = 0 mm (Maximum engagement)



average screw-in depth: S = 3 mm (Recommended position)



Date: May 2025

max. screw-in depth: S = 6 mm (Minimum engagement)

- S Screw-in depth of the StoVentro[™] Adjustment Screw
- StoVentro[™] T-Profile
- ② StoVentro[™] Adjustment Screw (M5 x 10)
- 3 StoVentro[™] Panel Profile
- (4) StoVentro[™] Sub-construction Screw with self-drilling and over-tightening protection (5.5 x 22 mm)
- (5) StoVentro[™] Agraffe Profile
- (6) StoVentec[™] Glass Panel 15mm Carrier Board Hydro, 1mm adhesive, plus 6 or 8mm safety glass

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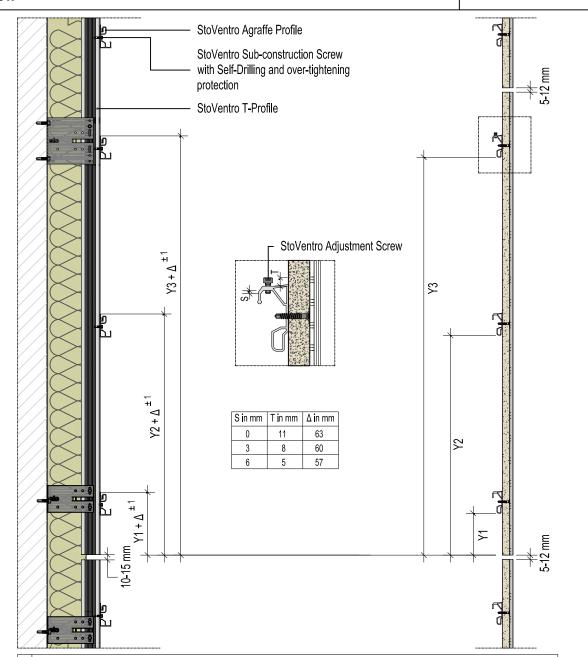
VGP-SAR-0052



StoVentro[™] Agraffe Profile configuration, StoVentec[™] Glass Panel to substrate
Section View

Date: March 2020

Detail No.: 90.G.048



- S | Screw-in depth of the StoVentro Adjustment Screw
- T | Projection of the StoVentro Adjustment Screw
- Y Distance between the StoVentro Panel Profile and the edge of the StoVentec Glass Panel in accordance with project specific shop drawings

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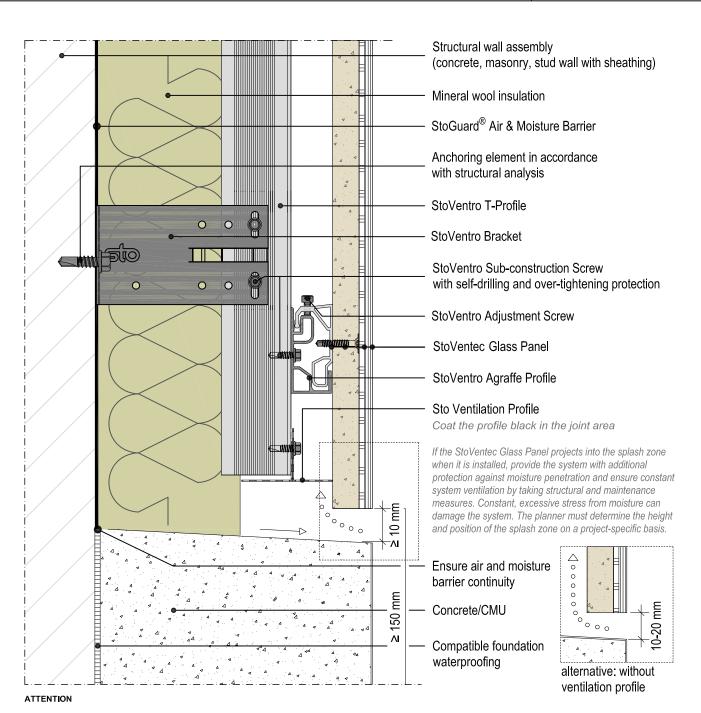


Panel installation at grade with Sto Ventilation Profile (StoVentec[™] Glass Panel flush with concrete curb)

Section View

Date: March 2020

Detail No.: 90.G.050



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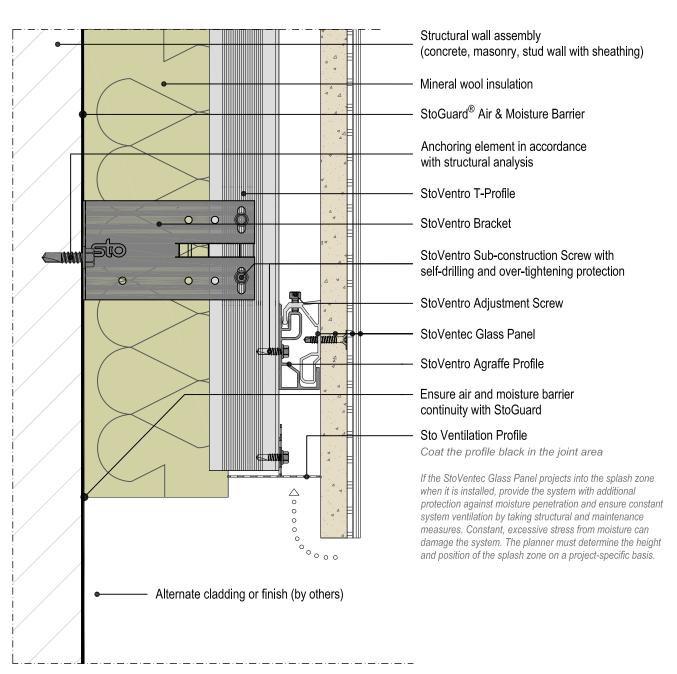


Panel insulation at grade with Sto Ventilation Profile (exposed substrate at grade)

Section View

Date: March 2020

Detail No.: 90.G.055



ATTENTION

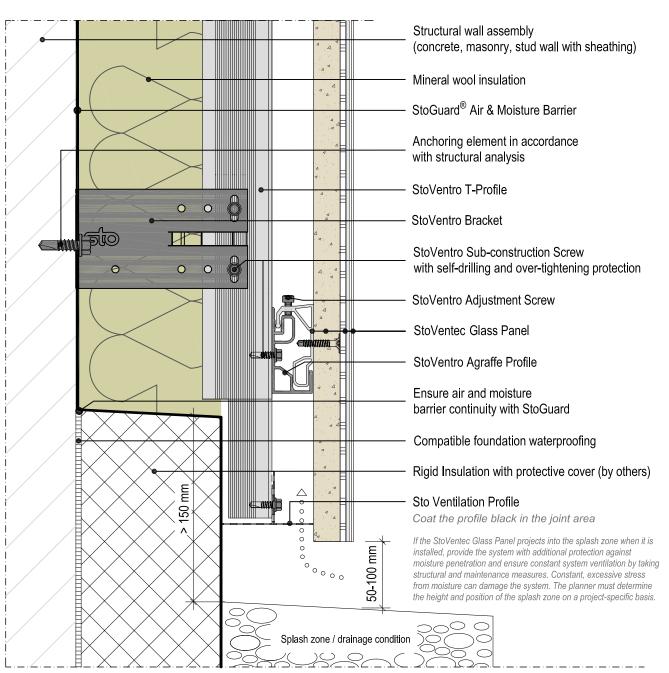
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Panel installation at grade with Sto Ventilation Profile (alternative splash zone for termination at grade less than 150mm) **Section View**

Date: March 2020

Detail No.: 90.G.065



ATTENTION

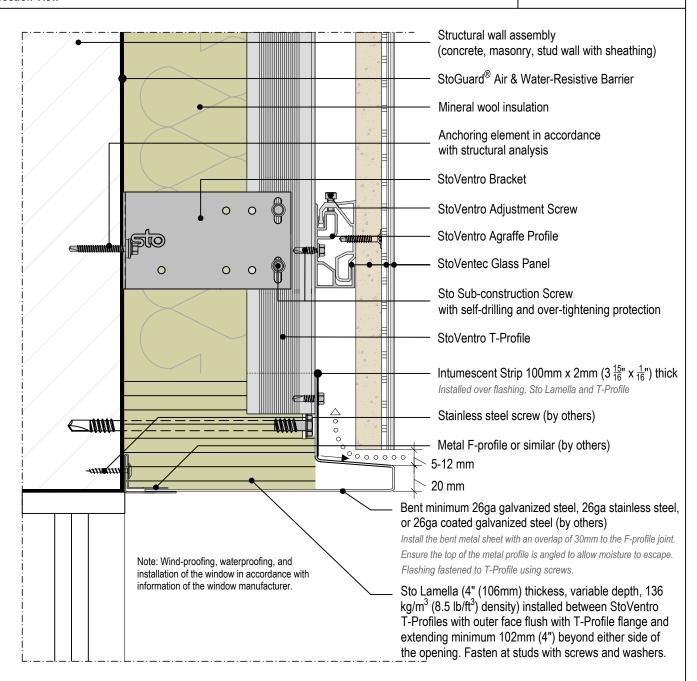
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Fire protection at Window Head with Sto Lamella and Intumescent Tape CAN ULC S134 Compliant, Intertek Design Listing No. STO/CWP 25-01 NFPA 285 Compliant, Intertek Design Listing No. STO/CWP 30-02 Section View

Date: August 2024

Detail No.: 90.G.080



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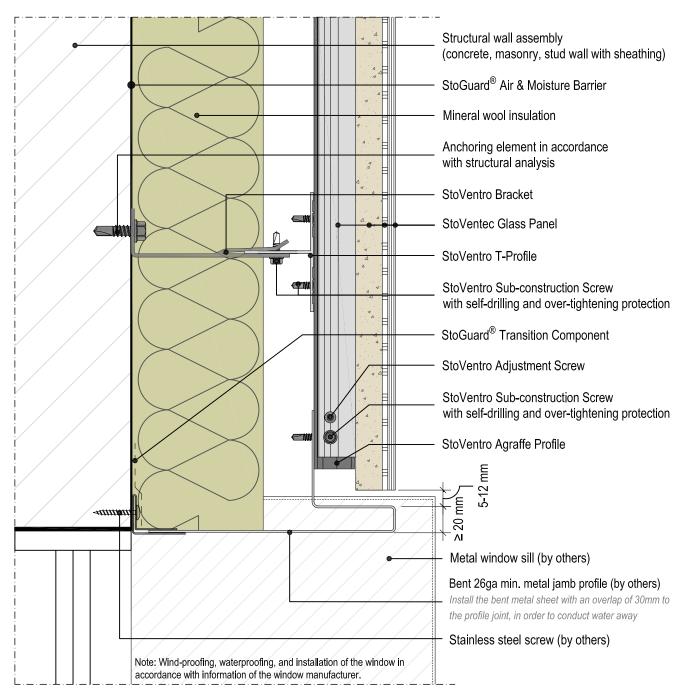


Date: March 2020

StoVentec[™] Glass

Panel Installation at Window Jamb with metal flashing

Plan View Detail No.: 90.G.085



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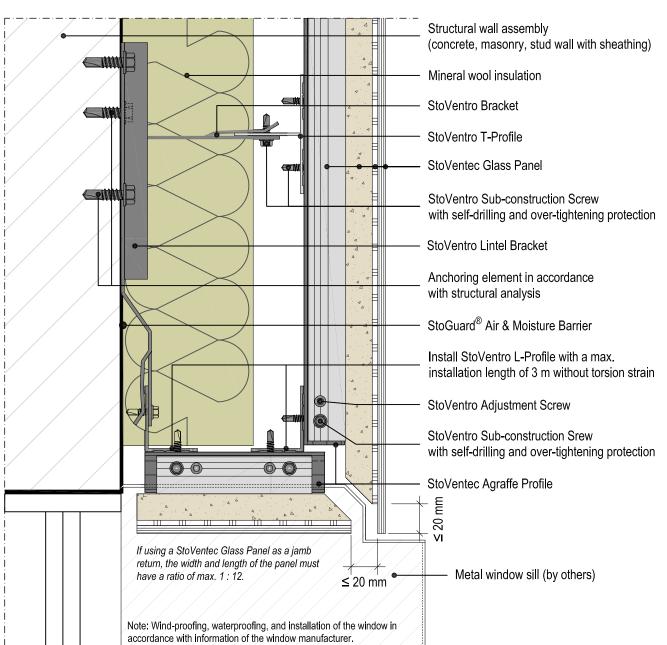


Panel Installation - Window Jamb with StoVentec[™] Glass Panel

Date: March 2020

Detail No.: 90.G.086

Plan View



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StoVentec™ Glass

Panel Installation - Window Sill with metal flashing

Section View

Date: March 2020

Detail No.: 90.G.090



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SIO

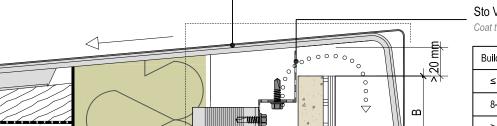
Panel Installation at parapet with 40mm ventilation gap

Section View

ATTENTION

Date: March 2020

Detail No.: 90.G.180



O

Parapet (by others)
Sto Ventilation Profile

Coat the profile black in the joint area

Building height	В
≤ 8 m	≥ 50mm
8-20 m	≥ 80mm
≥ 20 m	≥ 100mm

in accordance with regulations for metalwork in the roofing trade

StoVentro Bracket

≥ 40 mm

StoVentro Adjustment Screw

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

StoVentec Glass Panel

StoVentro Agraffe Profile

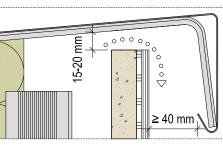
StoVentro T-Profile

Anchoring element in accordance with structural analysis

Mineral wool insulation

StoGuard® Air & Moisture Barrier

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



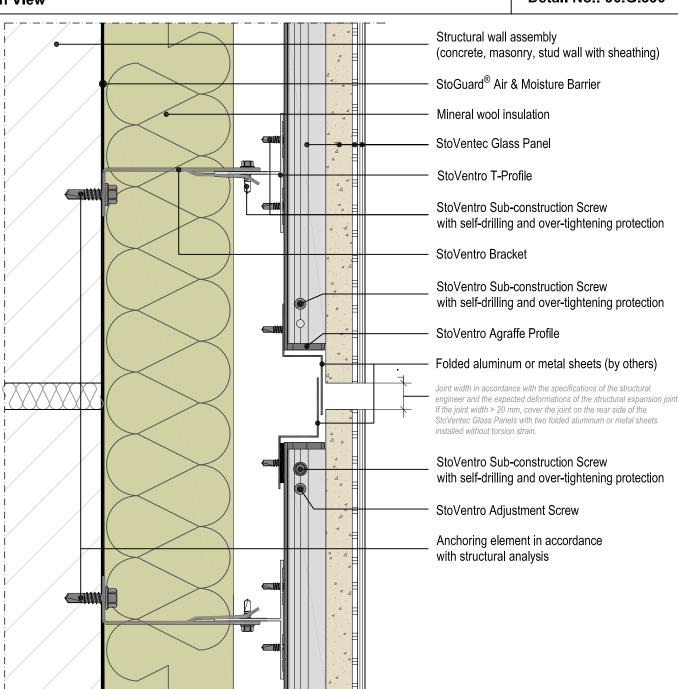
alternative: without ventilation profile

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Panel Installation at Wall Structural Joint StoVentec™ Glass Panel joint with folded aluminum or metal sheets Plan View Date: March 2020

Detail No.: 90.G.390



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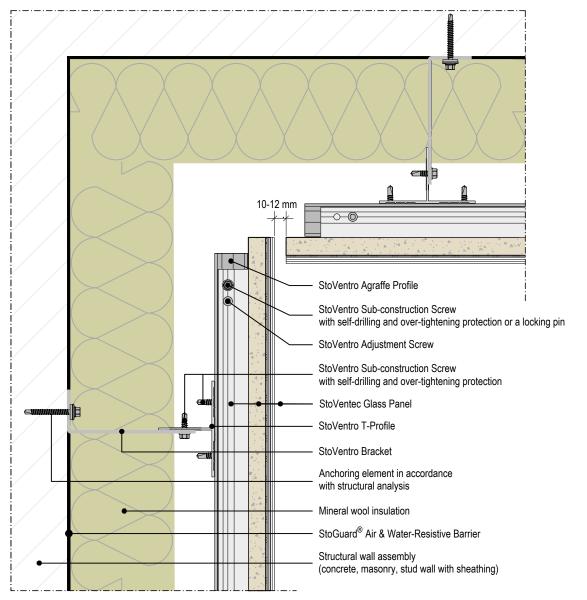


Date: May 2025

StoVentec[™] Glass

Panel installation - Inside corner

Plan View Detail No.: 90.G.400



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VGP-SAR-0220

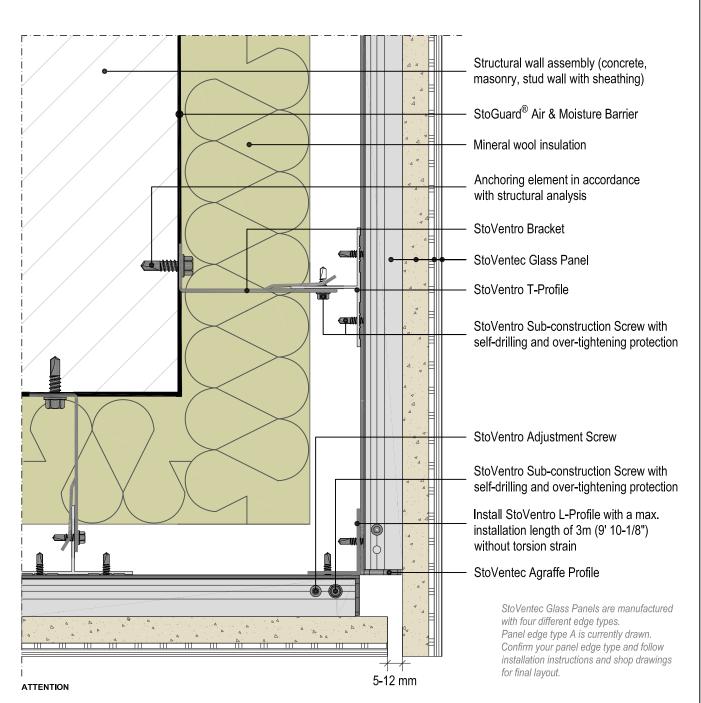


Panel installation - Outside Corner using supplemental bracing Panel edge type A to Panel edge type A

Plan View

Date: March 2020

Detail No.: 90.G.410



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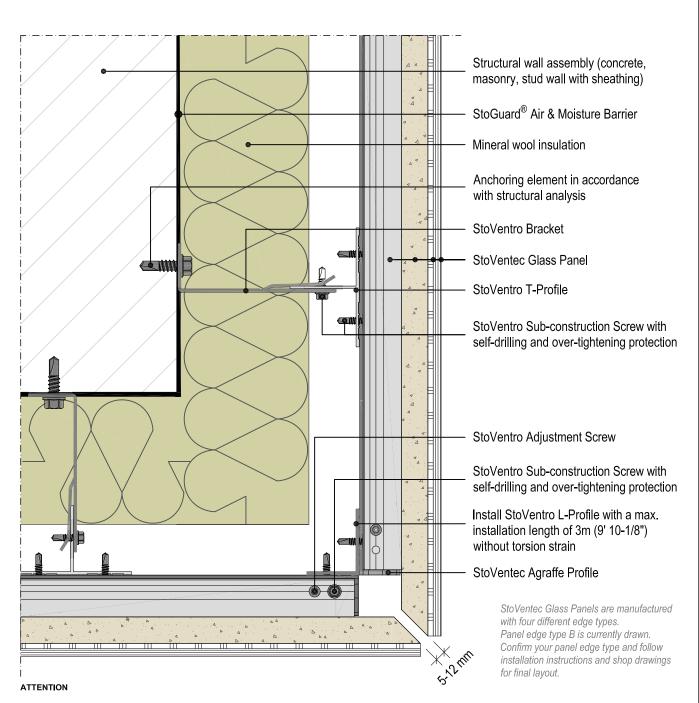


Panel installation - Outside Corner using supplemental bracing Panel edge type B to Panel edge type B

Plan View

Date: March 2020

Detail No.: 90.G.411



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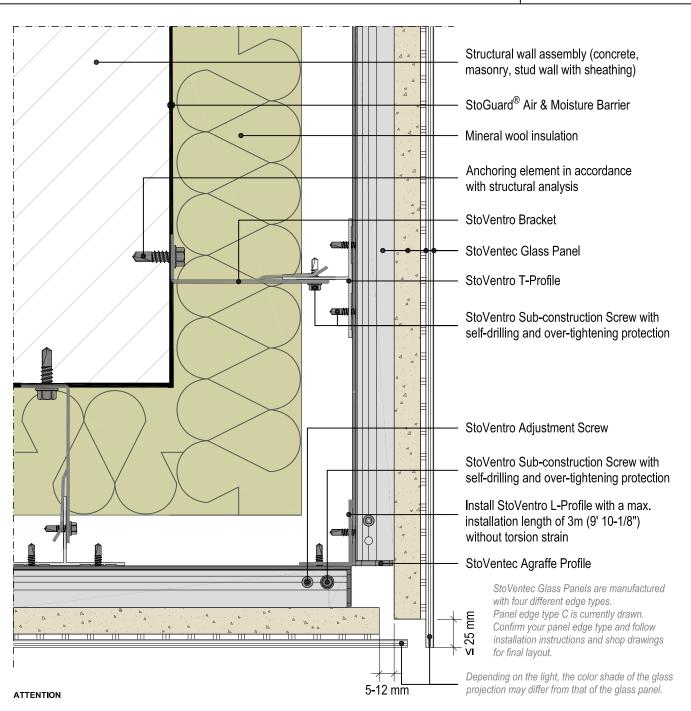


Panel installation - Outside Corner using supplemental bracing Panel edge type C to Panel edge type C

Plan View

Date: March 2020

Detail No.: 90.G.412



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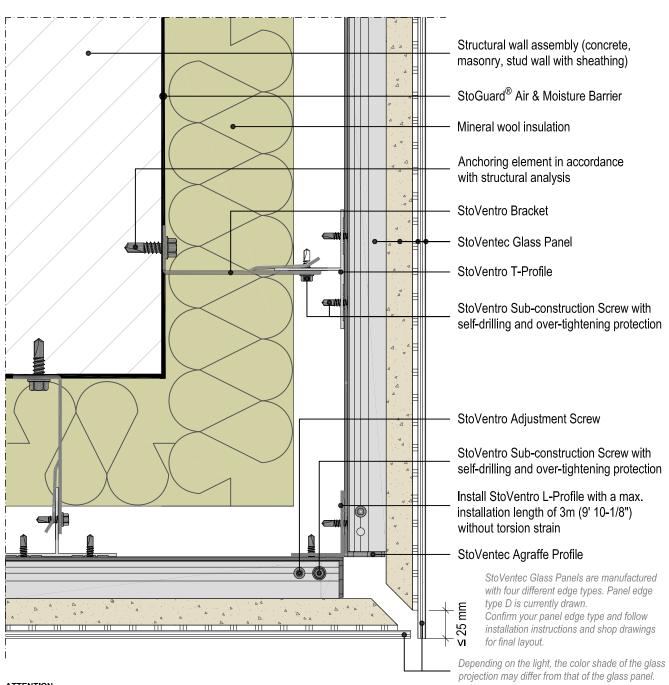


Panel installation - Outside Corner using supplemental bracing Panel edge type D to Panel edge type D

Plan View

Date: March 2020

Detail No.: 90.G.413



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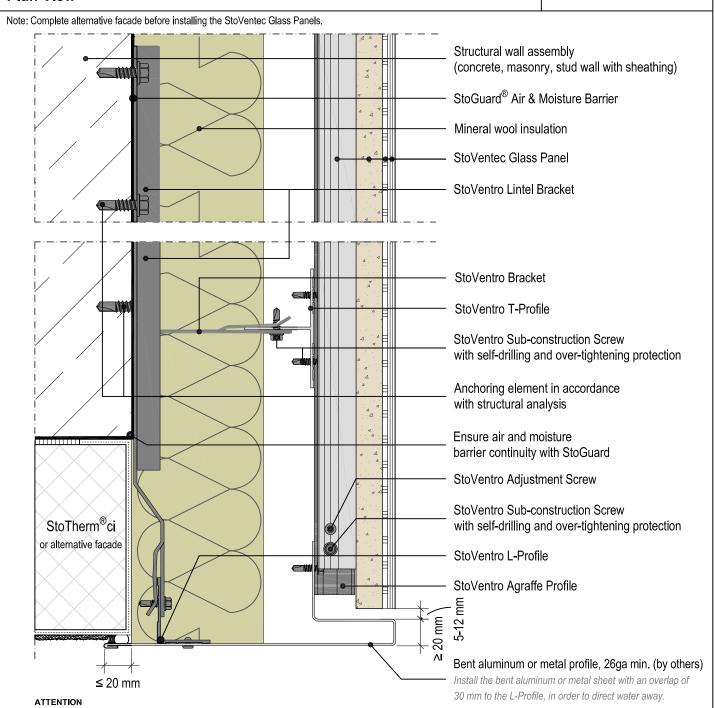
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Panel Installation at Outside Corner to alternative facade with aluminum or metal profile Plan View

Date: March 2020

Detail No.: 90.G.419



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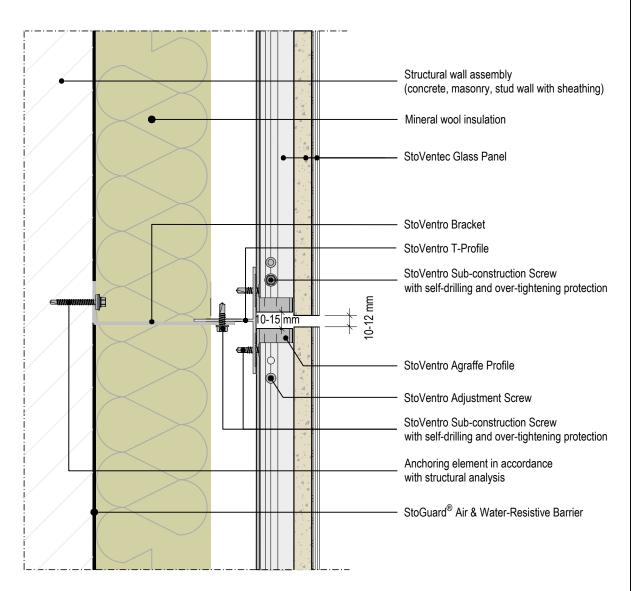


Date: May 2025

StoVentec[™] Glass

Panel Installation - Vertical StoVentec Glass Panel joint at StoVentro $^{^{\text{TM}}}$ T-Profile

Plan View Detail No.: 90.G.460



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VGP-SAR-0011

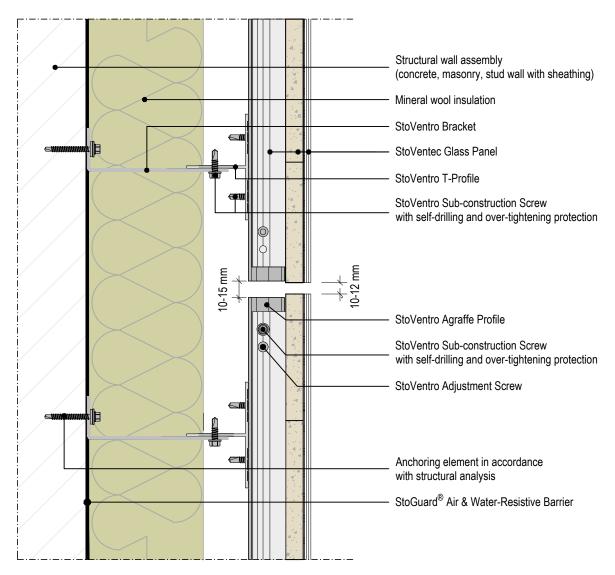


Date: May 2025

StoVentec[™] Glass

Panel Installation - Vertical StoVentec Glass Panel joint offset from $\mathsf{StoVentro}^{^\mathsf{TM}}$ T-Profile

Plan View Detail No.: 90.G.461



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VGP-SAR-0012

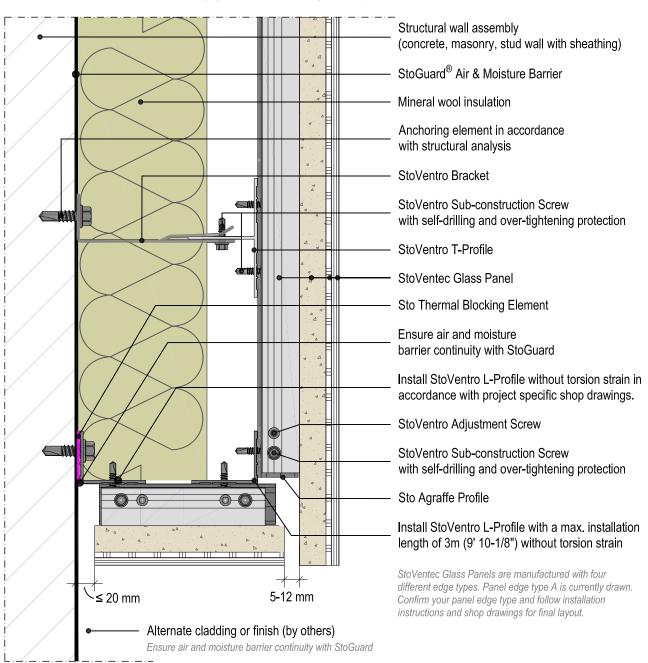


Panel Installation - Returning StoVentec Glass Panel to Alternative Facade Panel edge type A to Panel edge type A Plan View

Detail No.: 90 G 470

Date: March 2020

Note: Min. StoVentec Glass Panel size, 100mm (4") or the width and length of the panel must have a ration of max. 1:12.



ATTENTION

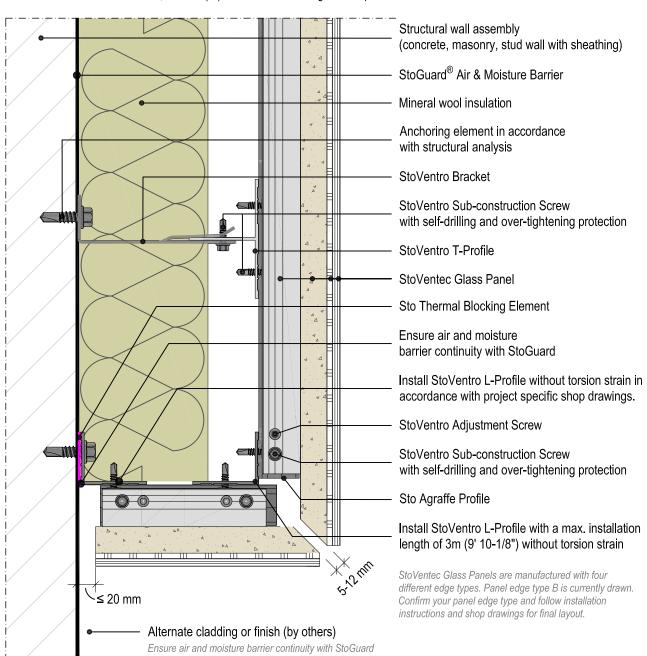
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Panel Installation - Returning StoVentec Glass Panel to Alternative Facade Panel edge type B to Panel edge type B Plan View Date: March 2020

Detail No.: 90.G.471

Note: Min. StoVentec Glass Panel size, 100mm (4") or the width and length of the panel must have a ration of max. 1:12.



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Panel Installation - Returning StoVentec Glass Panel to Alternative Facade Panel edge type C to Panel edge type C Plan View

Note: Min. StoVentec Glass Panel size, 100mm (4") or the width and length of the panel must have a ration of max. 1:12.

Detail No.: 90.G.472

Date: March 2020

Structural wall assembly (concrete, masonry, stud wall with sheathing) StoGuard® Air & Moisture Barrier Mineral wool insulation Anchoring element in accordance with structural analysis StoVentro Bracket StoVentro Sub-construction Screw with self-drilling and over-tightening protection StoVentro T-Profile StoVentec Glass Panel Sto Thermal Blocking Element Ensure air and moisture barrier continuity with StoGuard Install StoVentro L-Profile without torsion strain in accordance with project specific shop drawings. StoVentro Adjustment Screw StoVentro Sub-construction Screw with self-drilling and over-tightening protection Sto Agraffe Profile Install StoVentro L-Profile with a max. installation length of 3m (9' 10-1/8") without torsion strain 25 Depending on the light, the color shade of the glass projection may differ from that of the glass panel. [']≤ 20 mm 5-12 mm StoVentec Glass Panels are manufactured with four Alternate cladding or finish (by others) different edge types. Panel edge type C is currently drawn. Confirm your panel edge type and follow installation Ensure air and moisture barrier continuity with StoGuard instructions and shop drawings for final layout.

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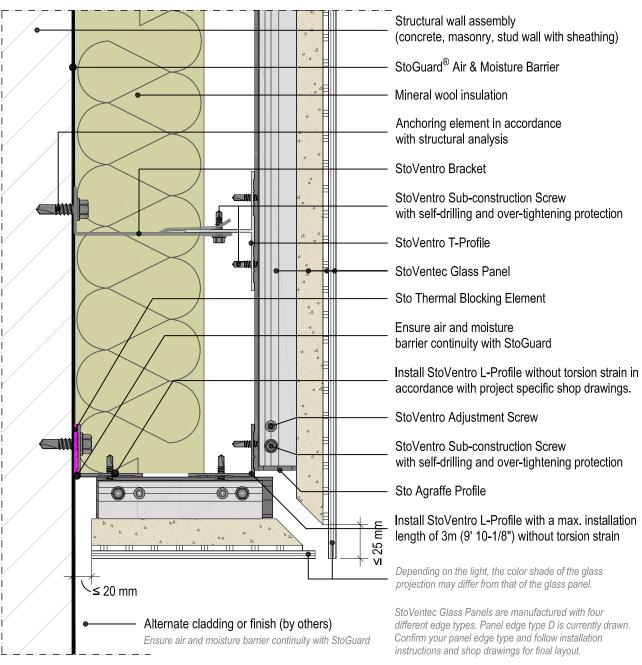
Date: March 2020

StoVentec[™] Glass

Panel Installation - Returning StoVentec Glass Panel to Alternative Facade Panel edge type D to Panel edge type D

Plan View Detail No.: 90.G.473

Note: Min. StoVentec Glass Panel size, 100mm (4") or the width and length of the panel must have a ration of max. 1:12.



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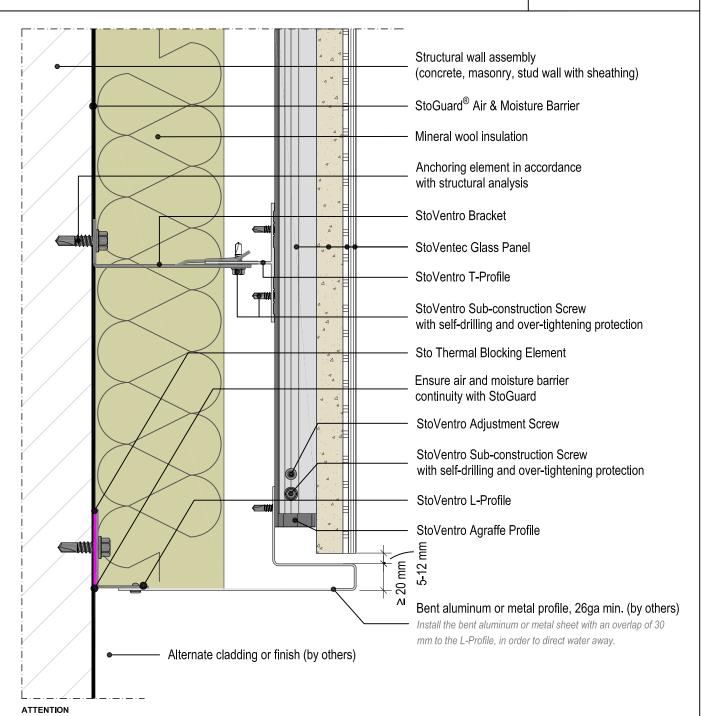


Panel Installation - Returning aluminum or metal flashing to Alternative Facade

Plan View

Date: March 2020

Detail No.: 90.G.474



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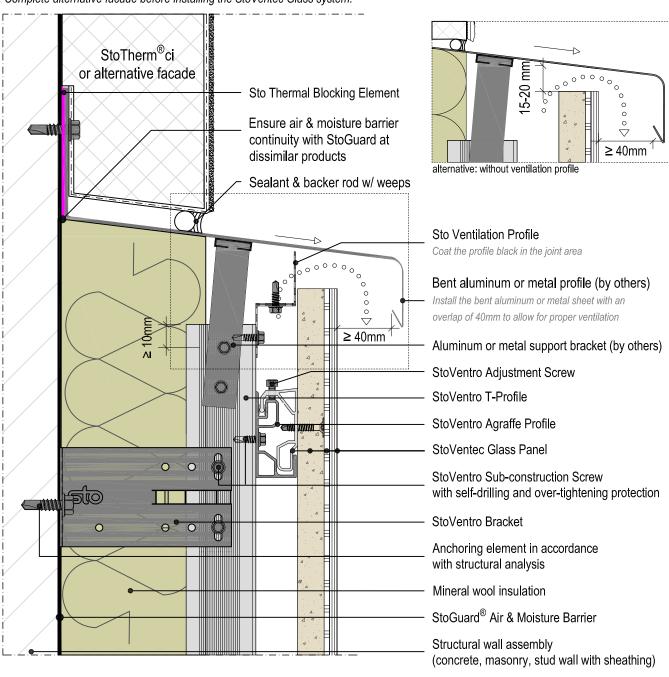


Panel Installation - Horizontal transition to alternative facade/wall substrate above (with ventilation profile) **Section View**

Date: March 2020

Detail No.: 90.G.475

Note: Complete alternative facade before installing the StoVentec Glass system.



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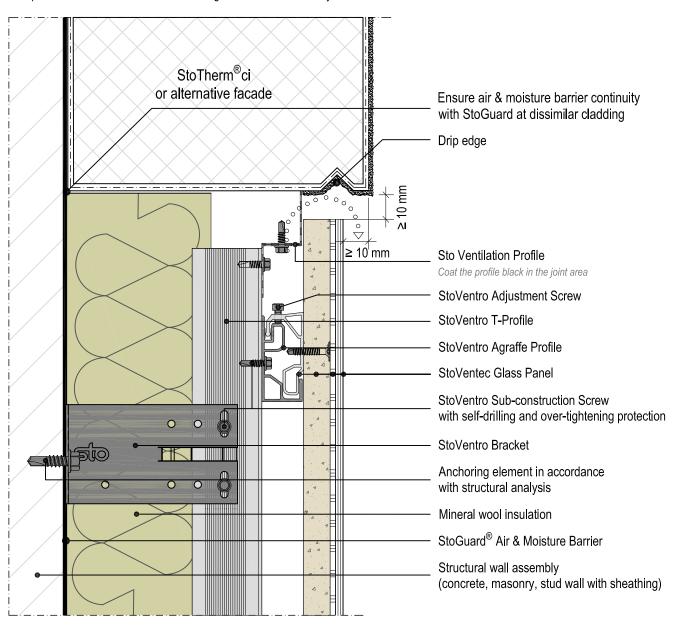
Panel Installation - Horizontal Transition of StoVentec Glass Panel under alternative facade/wall substrate

Section View

Date: March 2020

Detail No.: 90.G.476

Note: Complete alternative facade before installing the StoVentec Glass system.



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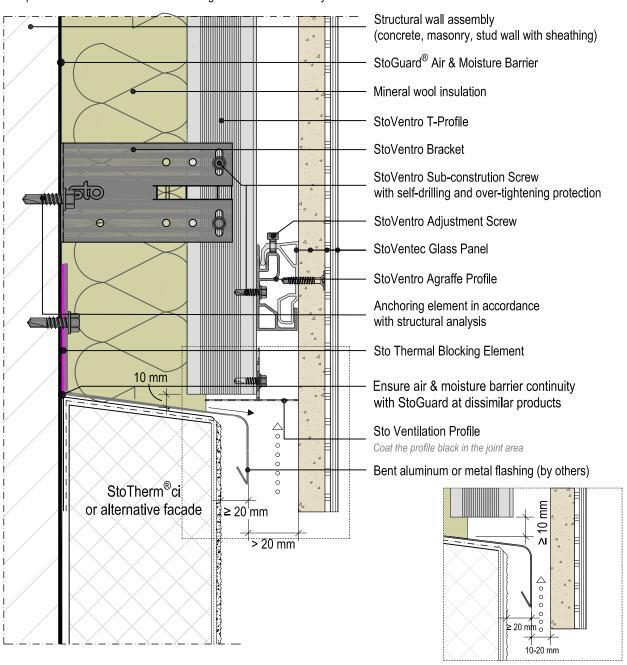


Panel Installation - Horizontal Transition of StoVentec Glass Panel above alternative facade/wall substrate (Glass Panel proud 40mm) **Section View**

Date: March 2020

Detail No.: 90.G.477

Note: Complete alternative facade before installing the StoVentec Glass system.



ATTENTION

alternative: without ventilation profile

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StoVentec™ Glass

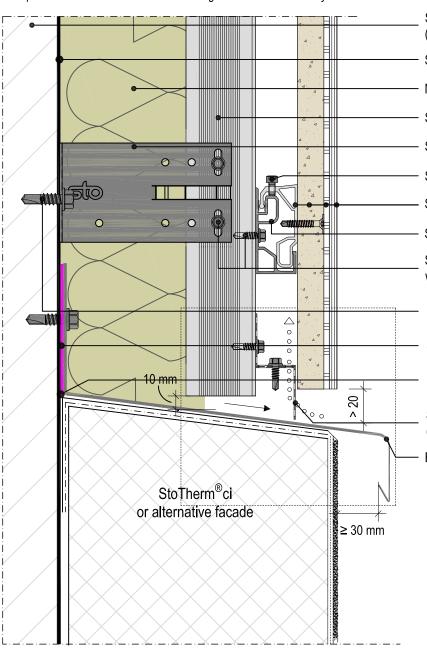
Panel Installation - Horizontal transition of StoVentec Glass Panel above alternative facade/wall substrate (Glass Panel flush)

Section View

Date: March 2020

Detail No.: 90.G.478

Note: Complete alternative facade before installing the StoVentec Glass system.



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

StoGuard[®] Air & Moisture Barrier

Mineral wool insulation

StoVentro T-Profile

StoVentro Bracket

StoVentro Adjustment Screw

StoVentec Glass Panel

StoVentro Agraffe Profile

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

Anchoring element in accordance with structural analysis

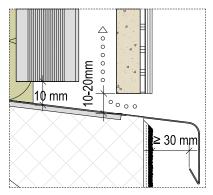
Sto Thermal Blocking Element

Ensure air & moisture barrier continuity with StoGuard at dissimilar products

Sto Ventilation Profile

Coat the profile black in the joint area

Bent aluminum or metal flashing (by others)



alternative: without ventilation profile

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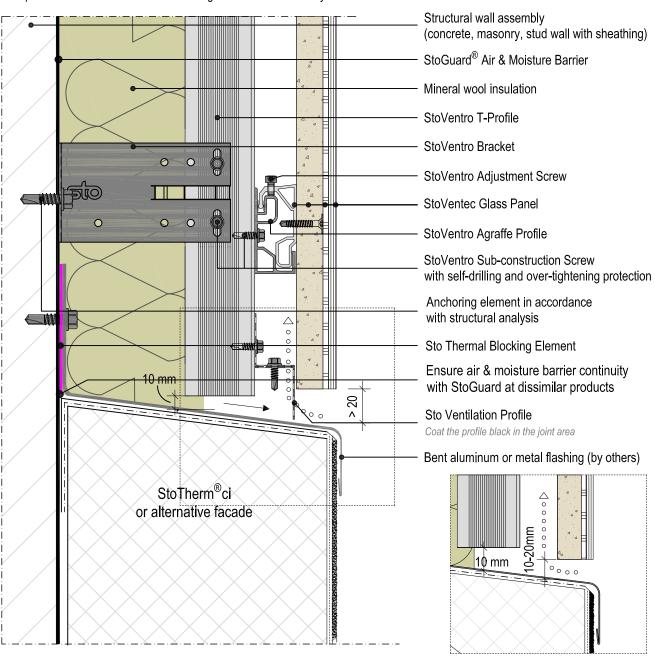
StoVentec™ Glass

Panel Installation - Horizontal transition of StoVentec Glass Panel above alternative facade/wall substrate (Glass Panel flush) no flashing overhang **Section View**

Date: March 2020

Detail No.: 90.G.480

Note: Complete alternative facade before installing the StoVentec Glass system.



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alternative: without ventilation profile

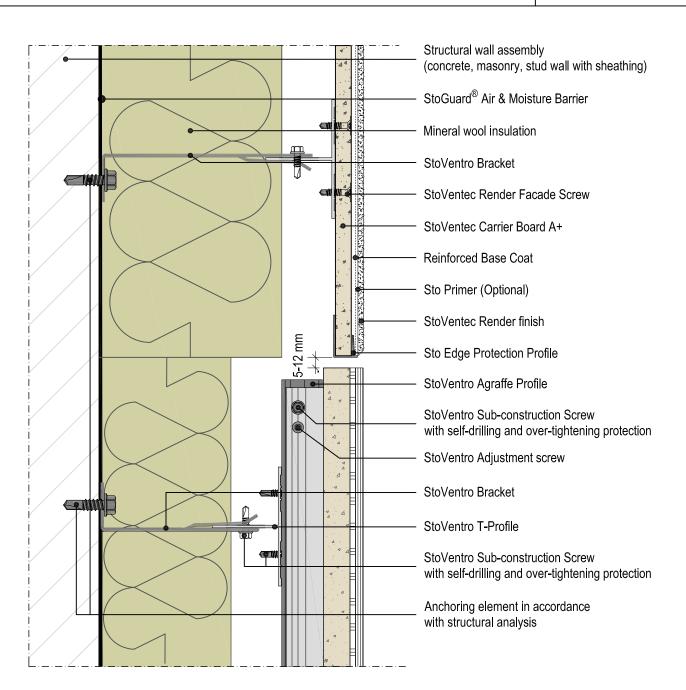


Panel Installation - Vertical Transition of StoVentec[™] Glass, flush to StoVentec[™] Render

Plan View

Date: March 2020

Detail No.: 90.G.485



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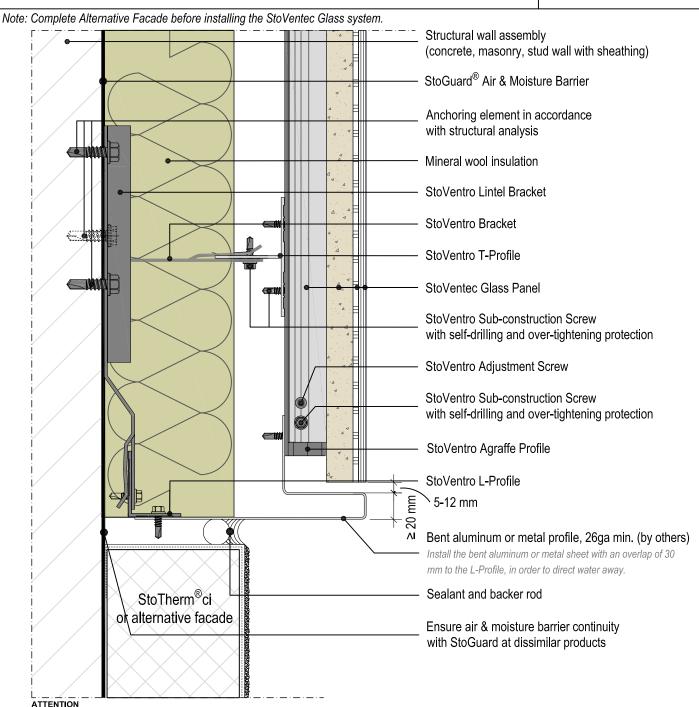


Panel installation - Vertical Transition of StoVentec Glass Panel to Alternative Facade/wall substrate (Glass Panel proud)

Plan View

Date: March 2020

Detail No.: 90.G.486



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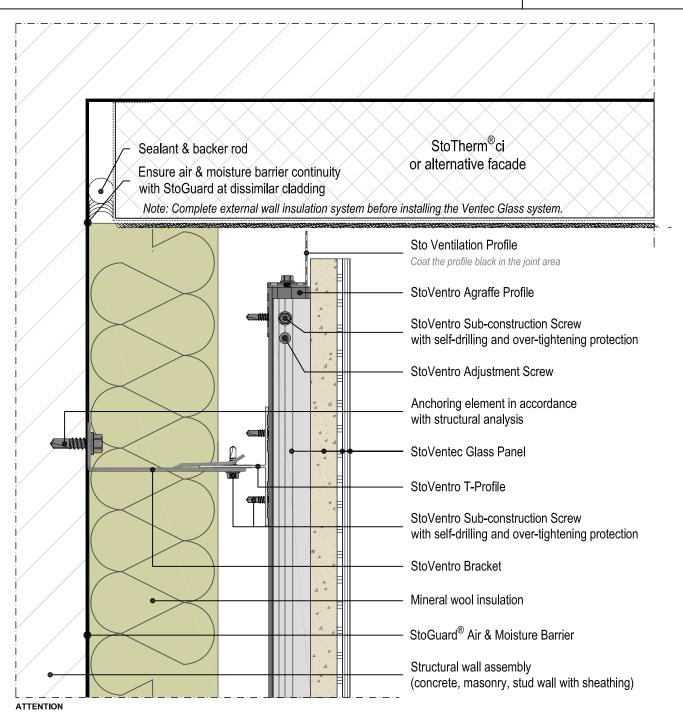


Panel installation - Inside corner to alternative facade/wall substrate (with ventilation profile)

Plan View

Date: March 2020

Detail No.: 90.G.490



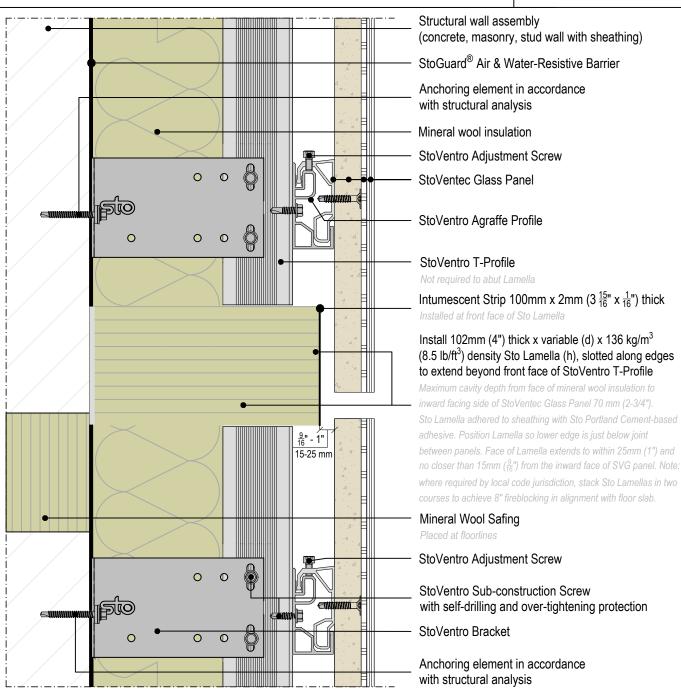
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Fire Protection at Floor Lines with Sto Lamella and Intumescent Tape Fire Break NFPA 285 Compliant, Intertek Design listing No. STO/CWP 30-02 **Section View**

Date: August 2024

Detail No.: 90.G.550



ATTENTION

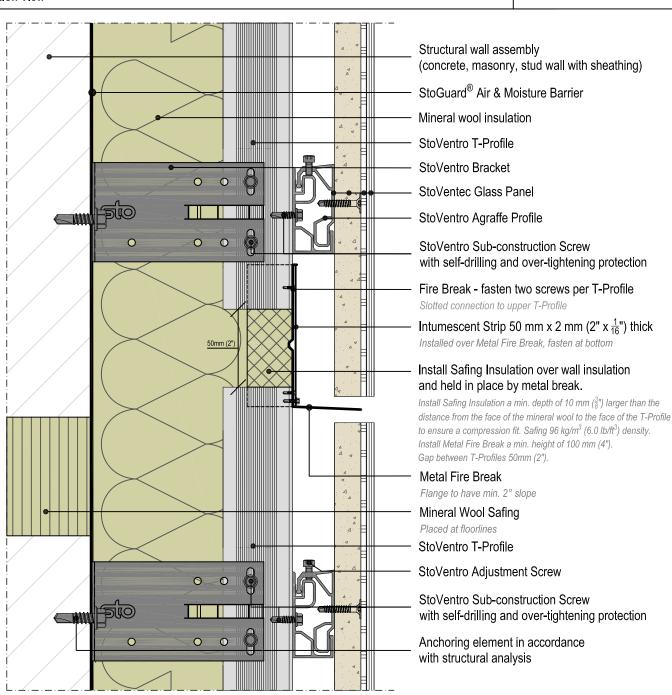
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Fire protection at Floor Lines with Dynamic Dual Barrier Fire Break CAN ULC S134 Compliant, Intertek Deisgn Listing No. STO/CWP 25-01 NFPA 285 Compliant, Intertek Design Listing No. STO/CWP 30-02 Section View

Date: March 2020

Detail No.: 90.G.551



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