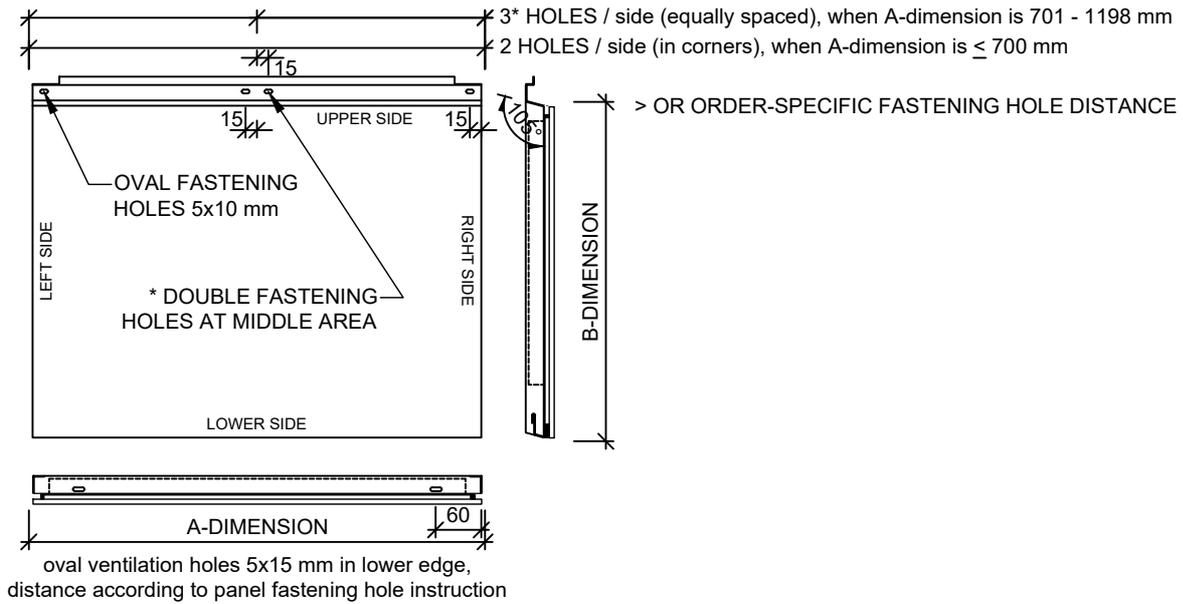


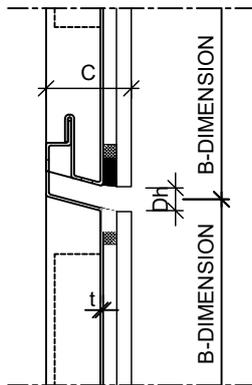
Drw. nr.	Contents of drawing	Date	Rev.	Rev. date
GSP500E-1	Basic panel	21.02.2017	F01	16.10.2020
GSP500E-2	Corner panel	05.09.2018	F01	16.10.2020
GSP500E-3	U-panel	05.09.2018	F01	16.10.2020
GSP500P-1	Panel properties	10.06.2019	F01	
GSP500M-1	Basic panel with mechanical fixing	10.06.2019	F01	16.10.2020

City sector		Block	Site/Reg. nr.	File nr.	
Building type			Drawing type		Nr.
Building, Name and address			Contents of drawing		Scale
 Rautaruukki Oyj Vimpelintie 661 FI - 62900 ALAJÄRVI FINLAND			Liberta Glass		1:Z
			DIMENSIONAL DRAWINGS (3 pcs)		
Date	05.09.2018	Designer	Ruukki		Work nr.
Drawn by		Checked			Drw. nr.
					Rev.

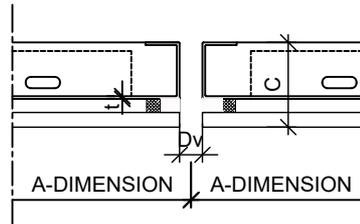
Date	21.02.2017	Rev. date	16.10.2020	Work nr.	Drw. nr.	Rev.
Drawn by	Ruukki	Rev.	F01		GSP500E-1	b
Scale	1:10	Building			File nr.	



HORIZONTAL JOINT



VERTICAL JOINT

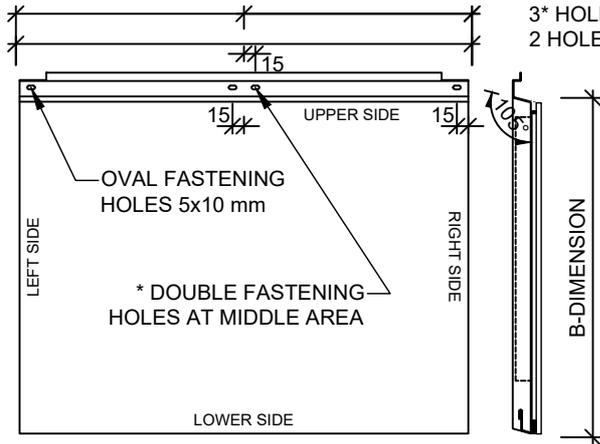


panel depth C = 39 mm
 horizontal joint Dh = 8 mm
 vertical joint Dv = 8 mm
 material thickness t = 1.20 mm (steel)

Amin = 240 mm, Bmin = 275 mm
 Amax = 1198 mm, Bmax = 798 mm

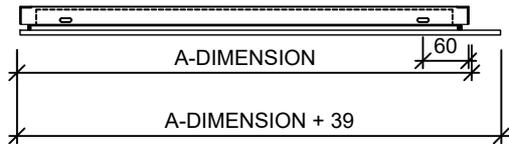
Starting fillet CA1SF2 required.

Date	05.09.2018	Rev. date	16.10.2020	Work nr.	Rev.
Drawn by	Ruukki	Rev.	F01	Drw. nr.	GSP500E-2
Scale	1:10	Building		File nr.	b



3* HOLES / side (equally spaced), when A-dimension is 701 - 1198 mm
 2 HOLES / side (in corners), when A-dimension is \leq 700 mm

> OR ORDER-SPECIFIC FASTENING HOLE DISTANCE

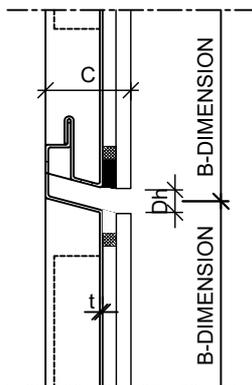


Glass panel width is calculated from A-dimension

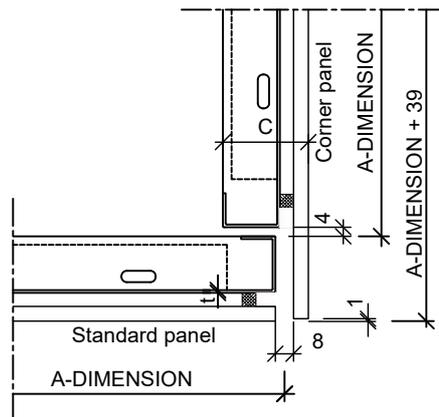
Overhanging part of the glass can also be positioned to the left side of the panel

oval ventilation holes 5x15 mm in lower edge,
 distance according to panel fastening hole instruction

HORIZONTAL JOINT



VERTICAL JOINT

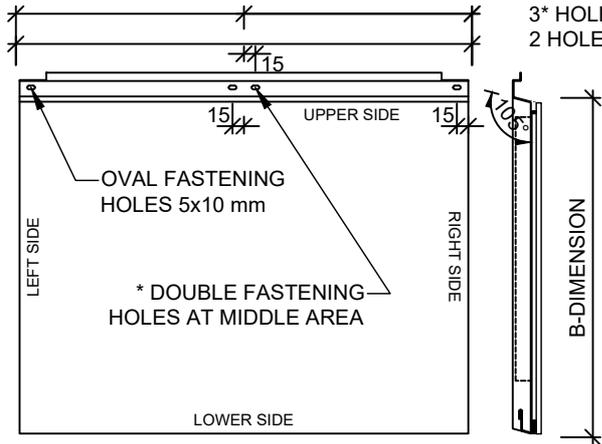


panel depth C = 39 mm
 horizontal joint Dh = 8 mm
 vertical joint Dv = 8 mm
 material thickness t = 1.20 mm (steel)

Amin = 240 mm, Bmin = 275 mm
 Amax = 1198 mm, Bmax = 798 mm

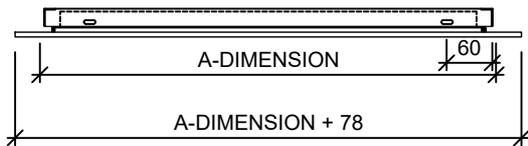
Starting fillet CA1SF2 required.

Date	05.09.2018	Rev. date	16.10.2020	Work nr.	Drw. nr.	Rev.
Drawn by	Ruukki	Rev.	F01		GSP500E-3	b
Scale	1:10	Building			File nr.	



3* HOLES / side (equally spaced), when A-dimension is 701 - 1198 mm
 2 HOLES / side (in corners), when A-dimension is ≤ 700 mm

> OR ORDER-SPECIFIC FASTENING HOLE DISTANCE

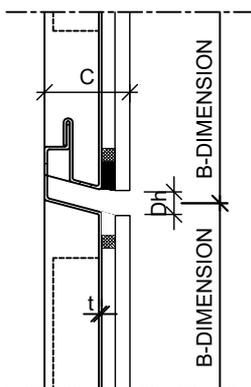


Glass panel width is calculated from A-dimension

Overhanging part of the glass is on both sides of the panel

oval ventilation holes 5x15 mm in lower edge,
 distance according to panel fastening hole instruction

HORIZONTAL JOINT

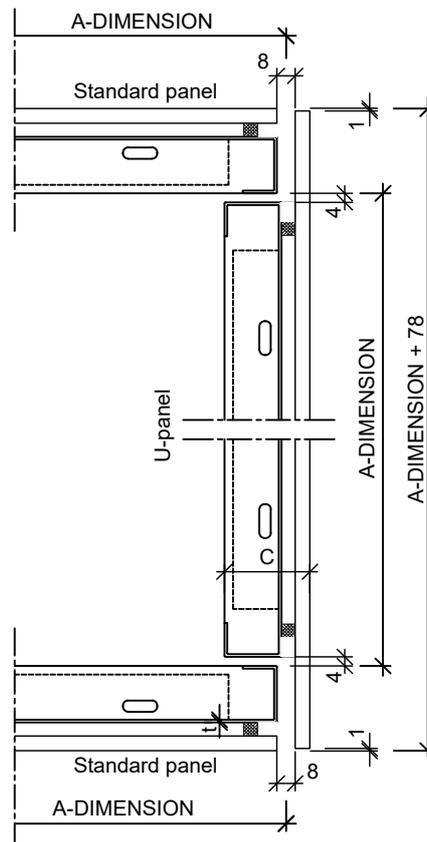


panel depth C = 39 mm
 horizontal joint Dh = 8 mm
 vertical joint Dv = 8 mm
 material thickness t = 1.20 mm (steel)

Amin = 240 mm, Bmin = 275 mm
 Amax = 1198 mm, Bmax = 798 mm

Starting fillet CA1SF2 required.

VERTICAL JOINT





Contents of drawing
Liberta Glass
Panel properties
Dimensional drawing

Date	10.06.2019	Rev. date		Work nr.		Drw. nr.	Rev.
Drawn by	Ruukki	Rev.	F01			GSP500P-1	
Scale		Building				File nr.	

Liberta™ Glass panel properties:

Mechanical properties:

Weight: ~ 19,5 kg/m²

Visual appearance:

Steel frame: metallic graphite RR45 matt

Glass: background painted to RAL colour

Fire rating: ratings of steel and glass are A1 *). Bonding not tested.

Load bearing capacity: maximum characteristic wind / snow load 2.4 kN/m²

Glass material: tempered safety glass 6 mm

Glass is glued on to PVDF- coated steel frame. PVDF-coating is suitable for environmental classes C2 and C3. In case of class C4 Ruukki's technical customer service will give further instructions (Environmental classes according to EN 12944-2).

Construction permits

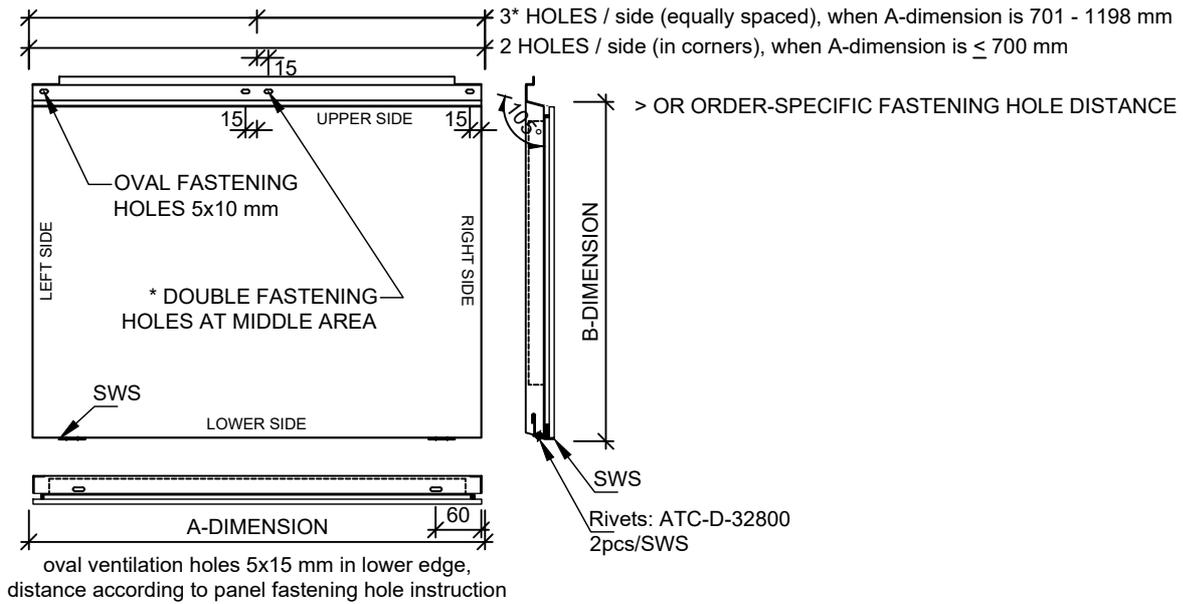
Liberta™ Glass panels as part of overall facade is subject to local applicable building regulations.

The system always requires individual local approval in a project, in which Ruukki can help providing necessary support.

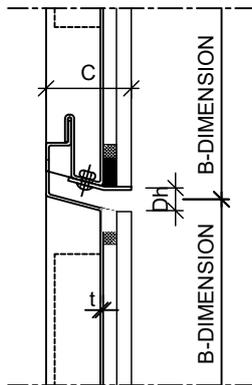
It is important that a consultant structural engineer for a project confirms the usability of the system as part of the overall construction.

*) Based on decisions 96/603/EY, 2000/605/EY and 2003/424/EY of Comite of EU.

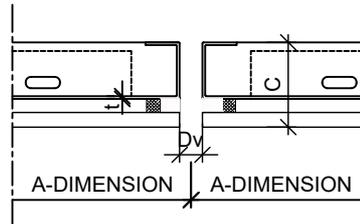
Date	10.06.2019	Rev. date	16.10.2020	Work nr.	Drw. nr.	Rev.
Drawn by	Ruukki	Rev.	F01		GSP500M-1	b
Scale	1:10	Building			File nr.	



HORIZONTAL JOINT



VERTICAL JOINT



panel depth C = 39 mm
 horizontal joint Dh = 8 mm
 vertical joint Dv = 8 mm
 material thickness t = 1.20 mm (steel)

Amin = 240 mm, Bmin = 275 mm
 Amax = 1198 mm, Bmax = 798 mm

Starting fillet CA1SF2 required.