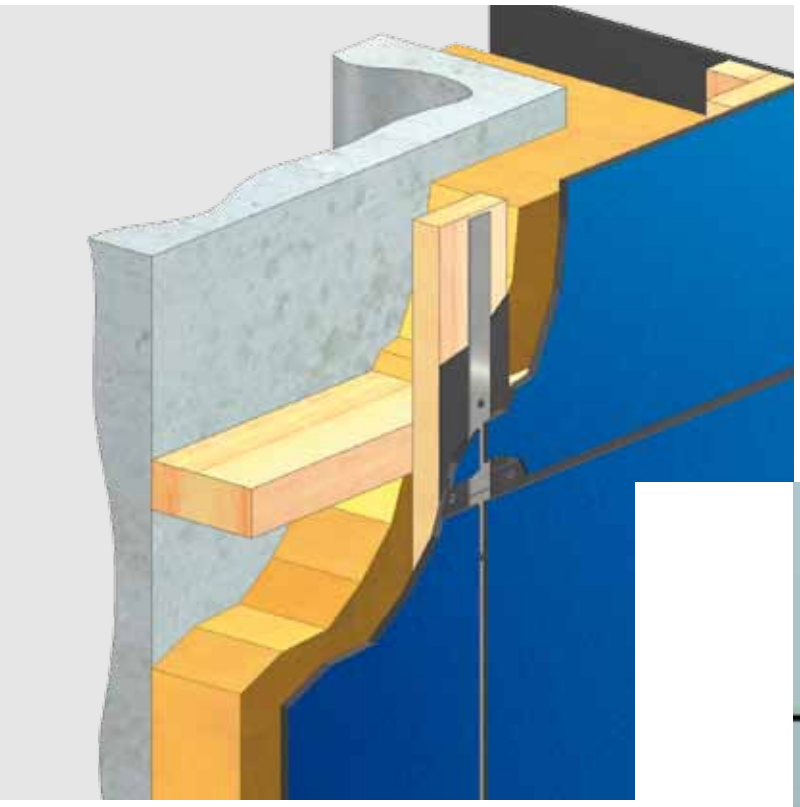
TS550 SEMI-VISIBLE (SEMI-EXPOSED) FIXING WITH METAL TONGUES ON A TIMBER SUB-FRAME

This system offers a cost effective solution for semi-visible installation of Trespa® Meteon® panels generating a vertical façade grid with closed joints.

Trespa® Meteon® panels with a minimum thickness of 8 mm may be fixed on a timber sub-frame using metal tongues inserted into grooves which are machined in the vertical edges of the panel.



> Woningen Sittard, The Netherlands

This document is intended to provide general recommendations only. Trespa provides these guidelines and all testing, code and design data for informational purposes only and strongly advises that the customer, project owner and architect seek independent advice from a certified construction professional and/or engineer regarding application and installation as well as compliance with design requirements, applicable codes, laws and regulations, and test standards. Please check your local codes and applicable design requirements for proper use.

OVERVIEW OF AVAILABLE CERTIFICATES

The following overview provides you with a general and non-binding indication of certificates in relation to fixing system TS550: semi-visible (semi-exposed) fixing with metal tongues on a timber sub-frame commonly used by Trespa customers in specific countries. To consult full details of available certificates please visit www.trespa.info/meteon/certificates

Country	Country code	Commonly used	Certificate
Netherlands	NL	■	KOMO attest-met-productcertificaat, Gevelbekleding systeem met Trespa Meteon en Trespa Meteon/ FR panelen GB-001/7
Germany	DE		No certificate available.
Belgium	BE		No certificate available.
France	FR		No certificate available.
United Kingdom	UK		No certificate available.
Spain	ES		No certificate available.
Italy	IT		No certificate available.
China	CN		No certificate available.
Chile	CL		No certificate available.
Trespa Export Countries	Other		Not applicable, local certificates may apply.

code U3056 version 2.0 date 14-06-2011

GENERAL INSTALLATION DETAILS

Cavity depth and ventilation

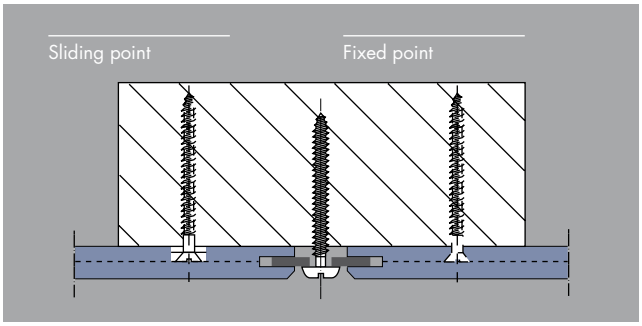
For a continuous ventilation behind the panel, Trespa recommends the free air cavity depth between the rainscreen cladding and the insulation or wall construction to be between 20 and 50 mm, in order to allow for ambient air to flow through from the ventilation inlets and outlets. Ventilation inlets and outlets must be the equivalent of minimum 50 square cm per linear meter over the whole façade. Cavity depth as well as ventilation inlets and outlets must be in accordance with applicable building standards, regulations and certificates.

Sub-frame

Trespa® Meteon® panels must be installed on a sub-frame of sufficient strength and permanent durability. Quality and/or treatment of the sub-frame must be in accordance with applicable building standards, regulations and certificates.

Fixing detail

- Hole diameter for fixed point is equal to the shank diameter of the screw.
- Hole diameter for sliding point (slotted hole) is equal to screw head diameter + 3 mm.
- Groove dimension: minimum 2.2 x 15 mm.
- Minimum remaining panel edge thickness is 2.9 mm.
- Halved (overlapping) joint height: 25 mm
- Metal tongue: 2 x 30 mm x (panel height minus 35 mm)
- Screws must always be centered in the holes and must not be over tightened.



OVERVIEW OF TECHNICAL INSTALLATION DETAILS

The following table gives a general overview of some of the most significant technical installation details in those countries where this fixing system is commonly used. For details of certification see: Overview of available certificates.

In certain countries specific certification requirements may apply. For countries in which a certificate for this fixing system is available, the following table presents a summary of the certificate. For countries in which no certificate for this fixing system may be available, the information given in the following table only contains an advise as to the installation commonly used by Trespa customers, as based on Trespa's experience. For all countries Trespa strongly advises that the customer, project owner and architect seek independent advice from a construction professional regarding the accordance to national and/or local building regulations of fixing systems. The information below does not contain all requirements with regard to the certificates. For design and installation, the complete certificate(s) must be considered. To consult these certificates, please visit **www.trespa.info/meteon/certificates**

Panel thickness

Panel thickness (mm)	Country with certificate
8, 10, 13	NL

Maximum panel height / length

Max. panel dimensions[A] (mm)	Country with certificate
3050 (height)	NL

[A] *For the various panel widths, please see: Maximum fixing distances (panel span) and edge clearance.*

Joint width

Joint width (mm)	Country with certificate
Minimum screw head diameter + 5 mm	NL

Minimum dimensions sub-frame

Minimum dimension timber battens (mm)	Country/Region with certificate
95 x 34	NL

Edge clearance

Both fixed points and sliding points must be positioned inside the halved joint with a minimum edge clearance of 10 mm.

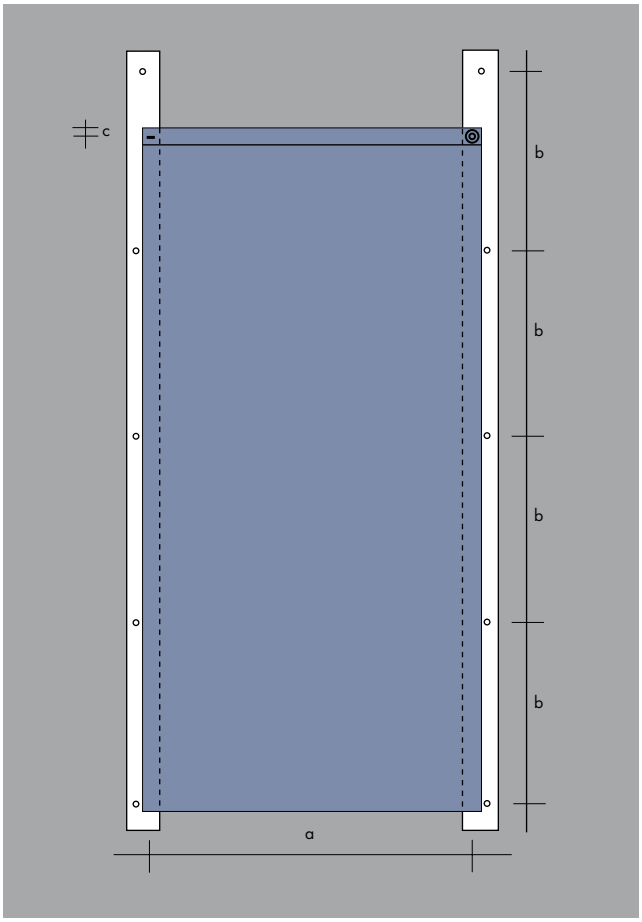
Recommended maximum fixing distances

Maximum fixing distances[B] (mm)	Panel thickness (mm) for Satin / Rock			Panel thickness (mm) for Gloss[C]		Country/Region with certificate
	8	10	13	10	13	
Horizontal fixing distances (panel span)	600	750	950	550	750	NL
Vertical fixing distances (in tongue)	500	500	500	500	500	NL

[B] *The maximum permitted fixing distances shown have been designed with a maximum (wind) load of 600 N/ m² and maximum deflection of L/200.*

[C] *Based on the surface properties of Gloss panels, the fixing distances are reduced.*

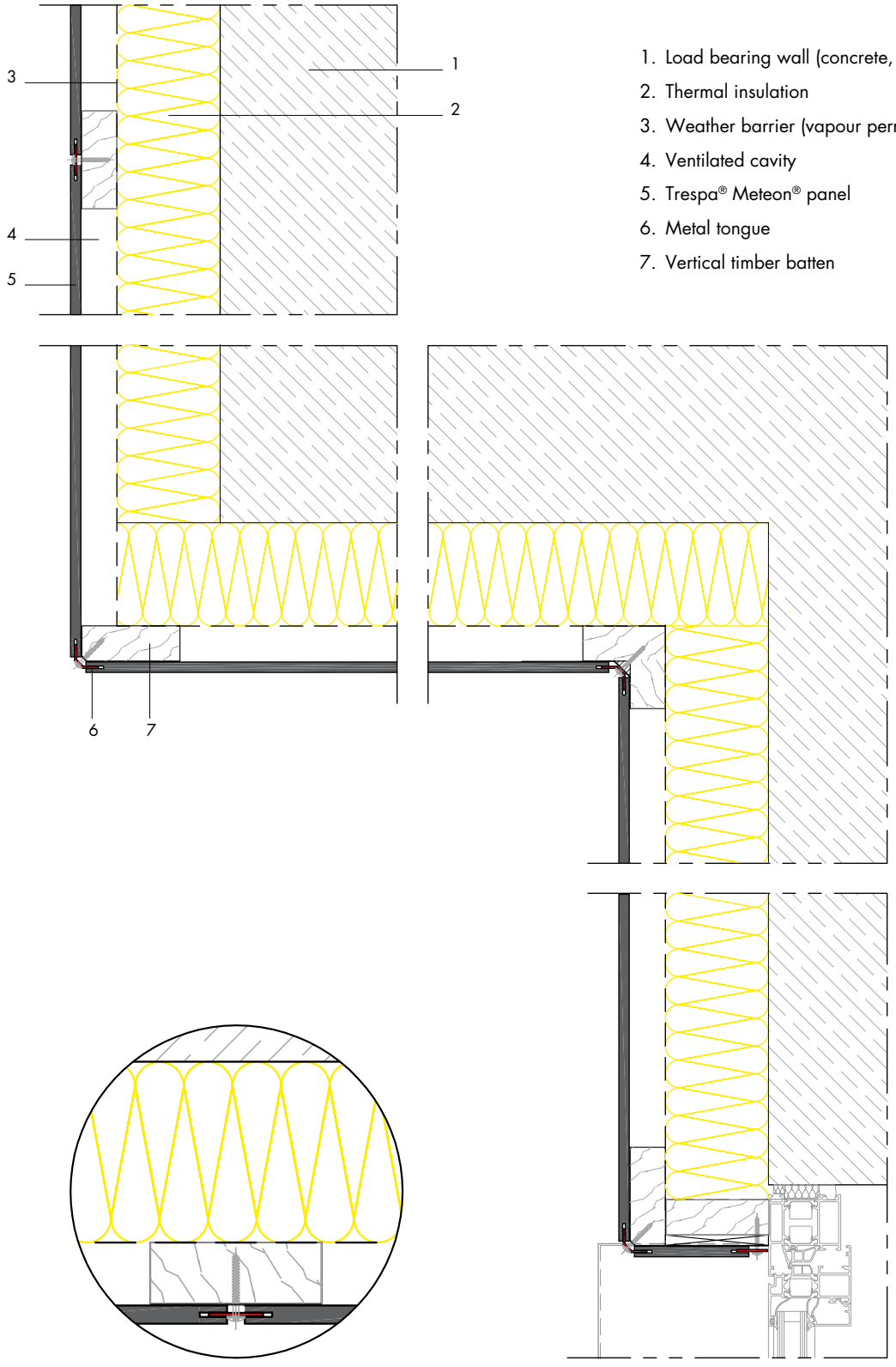
Fixing distances must be calculated in accordance with applicable local standards, regulations and certificates and should be verified by a structural engineer.
For more information about deflection and wind loads, please visit **www.trespa.info/meteon/fixingsystems**



a = horizontal fixing distance (panel span)
b = vertical fixing distance (in tongue)
c = edge clearance

◎ = fixed point
○ = sliding point

Horizontal cross-section



1. Load bearing wall (concrete, masonry)
2. Thermal insulation
3. Weather barrier (vapour permeable)
4. Ventilated cavity
5. Trespa® Meteon® panel
6. Metal tongue
7. Vertical timber batten

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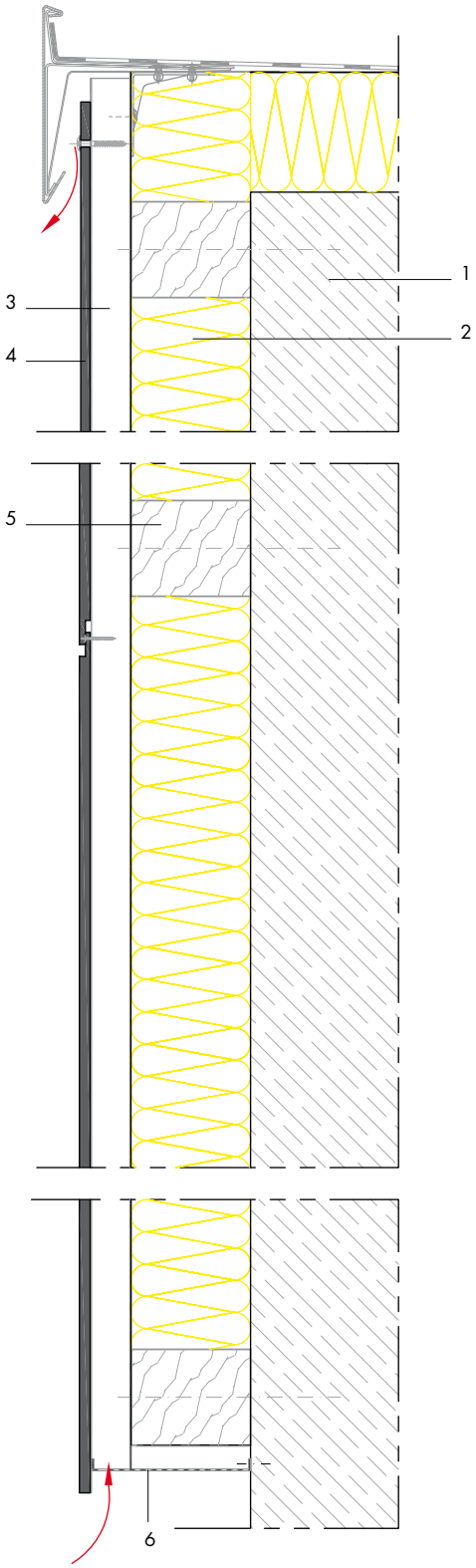
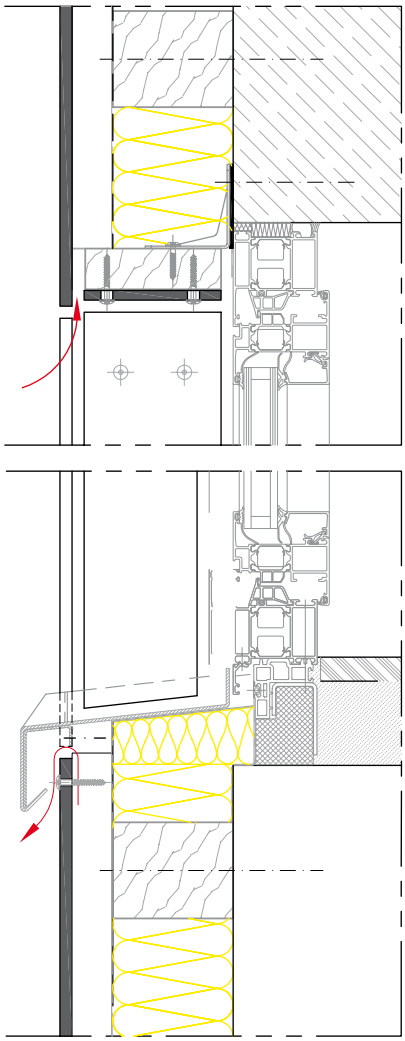
Vertical cross-section



1. Load bearing wall (concrete, masonry)
2. Thermal insulation
3. Ventilated cavity and vertical timber batten
4. Trespa® Meteon® panel
5. Horizontal timber counter batten
6. Ventilation profile



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