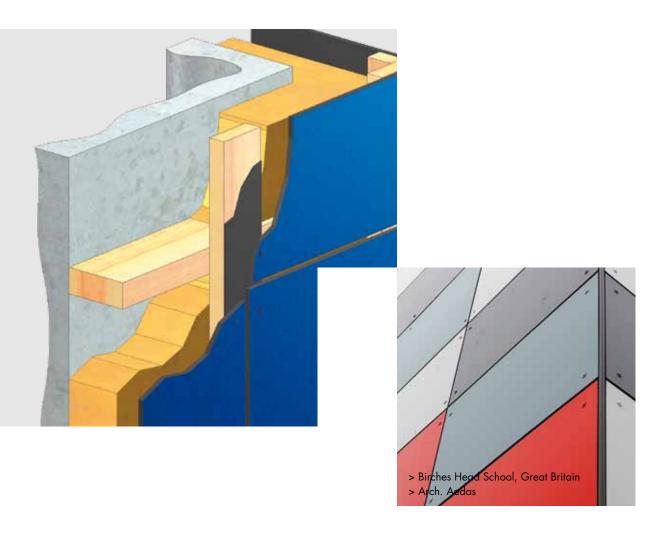
# TS150 VISIBLE (EXPOSED) FIXING WITH SCREWS ON A TIMBER SUB-FRAME

This system offers a cost effective solution for installing Trespa® Meteon® panels in a large variety of panel dimensions.

Trespa® Meteon® panels with a minimum thickness of 6 mm may be fixed on a timber sub-frame, using powder coated screws (available in a wide range of Trespa® colours through third parties).



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.

TRESPA

# code U3050 version 2.0 date 14-06-2011

## **OVERVIEW OF AVAILABLE CERTIFICATES**

The following overview provides you with a general and non-binding indication of certificates in relation to fixing system TS150: visible (exposed) fixing with screws 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	•	Allgemeine bauaufsichtliche Zulassungen: Z-33.2-10 Trespa Meteon/FR-KR Fassadensystem Z-33.2-17 Trespa Meteon/FR Fassadensystem
Belgium	BE		Technische goedkeuring met certificaat voor Trespa Meteon en Trespa Meteon FR ATG 05/2021 Agrément technique avec certification de Trespa Meteon et Trespa Meteon FR ATG 05/2021
France	FR	•	Avis Technique 2/10-1396: Trespa Meteon TS150 fixation par vis sur ossature bois.
United Kingdom	UK	•	Agrément certificate Trespa Meteon wall cladding panels and fixings BBA Agrément Certificate 99/3629
Spain	ES	•	Sistema de revestimiento de fachadas ventiladas con placas Trespa Meteon FR
Italy	IT		No certificate available.
China	CN		No certificate available.
Chili	CL		No certificate available.
Trespa Export Countries	Other		Not applicable, local certificates may apply.



### **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. Trespa further recommends the use of a flat EPDM gasket to the full width of vertical battens of the sub-frame.

#### Fixing detail

Trespa® Meteon® panels with a thickness of 6, 8 and 10 mm can be fixed on the sub-frame with fast fixing screws (available in a wide range of Trespa® colours through third parties). To retain panel position, each panel must have one fixed point in the centre of the panel.

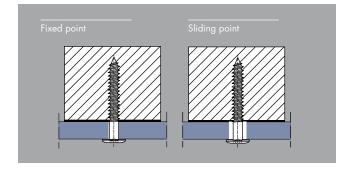
Fixed point – hole diameter:

- 5 mm for fast fixing screw
- equal to shank diameter for other screws

Sliding point – hole diameter:

- 8 mm for fast fixing screw
- shank diameter + 3 mm for other screws

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 <sup>a</sup> (mm)	Country with certificate	Country without certificate
6, 8, 10	NL, DE, BE, FR, UK, ES	IT

<sup>&</sup>lt;sup>A</sup> 13 mm may be applied in certain circumstances, please contact your local Trespa representative.

#### **Maximum panel dimension**

Max. panel dimension (mm)	Country with certificate	Country without certificate
3050 x 1530 or 2550 x 1860	NL, DE, BE, FR <sup>B</sup> , UK, ES	IT

<sup>&</sup>lt;sup>B</sup> For other panel dimensions, please consult the certificate.

#### Joint width

Joint width (mm)	Country with certificate	Country without certificate
10	NL, DE, BE, FR <sup>c</sup> , UK, ES	IT

<sup>&</sup>lt;sup>C</sup> For other joint width, please consult the certificate.

Based on applicable building standards, regulations or certificates, wider joints may be permissible.

#### Minimum dimensions sub-frame

Minimum dimension timber battens (mm)	Country with certificate	Country without certificate
Intermediate / End battens 45 x 34 Jointing battens 95 x 34	NL, UK, ES	IΤ
Intermediate / End battens 46 x 35 Jointing battens 95 x 35	BE	
Intermediate / End battens 50 x 34 Jointing battens 105 x 34	DE	
Intermediate / End battens 40 x 45 Jointing battens 80 x 45	FR	



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#### **Edge clearance**

Edge clearance (mm)	Country with certificate	Country without certificate
Min. 20 mm and max. 10 x panel thickness	NL, DE, BE, UK, FR, ES	IΤ

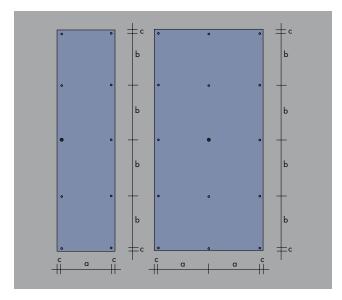
#### Recommended maximum fixing distances

Maximum fixing distances <sup>D,E</sup> (mm)	Panel thickness (mm) for Satin / Rock		ess	Panel thickness (mm) for Gloss <sup>f</sup>	Country with certificate	Country without certificate
	6	8	10	10		
2 fixings in one direction	450	600	750	550	NL, DE, BE, FR, UK, ES	П
3 or more fixings in one direction	550	750	900	700	NL, BE, FR, UK, ES	П
3 or more fixings in one direction	550	700	800	700	DE	

<sup>&</sup>lt;sup>D</sup> Fixing distances for soffit application must be multiplied by 0.75.

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



horizontal fixing distance

b = vertical fixing distance

= edge clearance

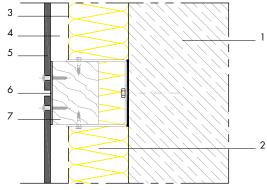
O = sliding point



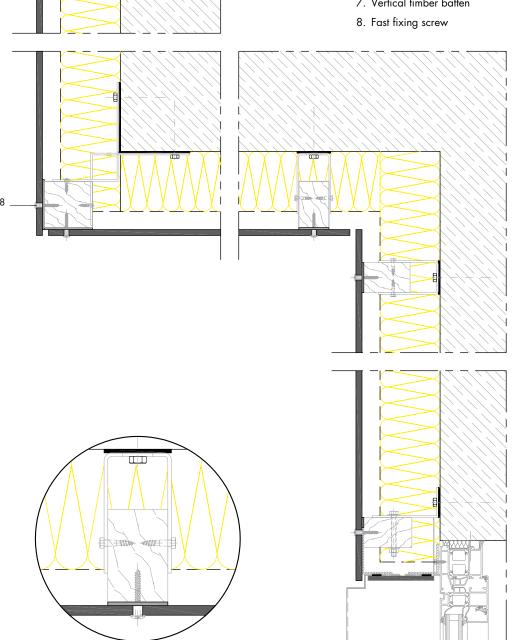
E The maximum permitted fixing distances shown have been designed with a maximum (wind) load of 600 N/ m² and maximum deflection of L/200.

<sup>&</sup>lt;sup>F</sup> Based on the surface properties of Gloss panels, fixing distances are reduced.

#### **Horizontal cross-section**

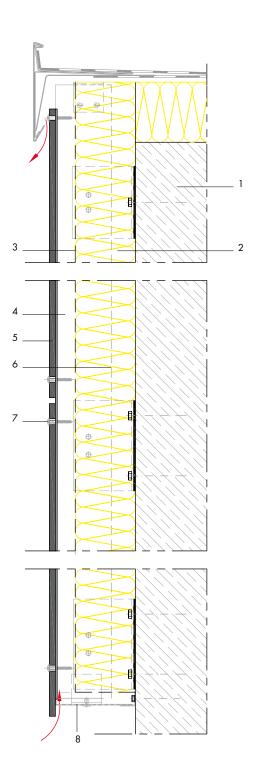


- 1. Load bearing wall (concrete, masonry)
- 2. Thermal insulation
- 3. Weather barrier (vapour permeable)
- 4. Ventilated cavity
- 5. Trespa® Meteon® panel
- 6. EPDM gasket
- 7. Vertical timber batten

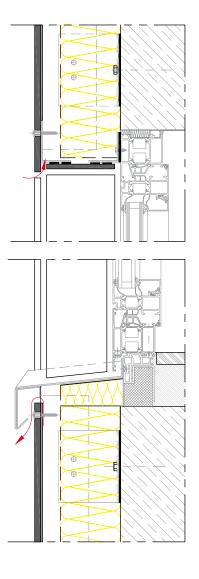


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#### **Vertical cross-section**



- 1. Load bearing wall (concrete, masonry)
- 2. Thermal insulation
- 3. Weather barrier (vapour permeable)
- 4. Ventilated cavity and vertical timber batten
- 5. Trespa® Meteon® panel
- 6. Vertical timber batten
- 7. Fast fixing screw
- 8. Ventilation profile





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