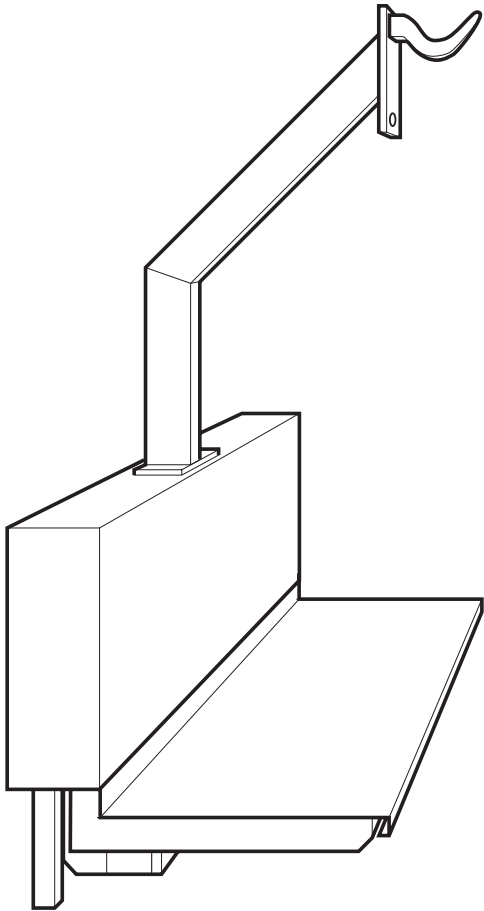


Installation information

**METTLER TOLEDO MultiRange
DW150 / DW150T wall scale**

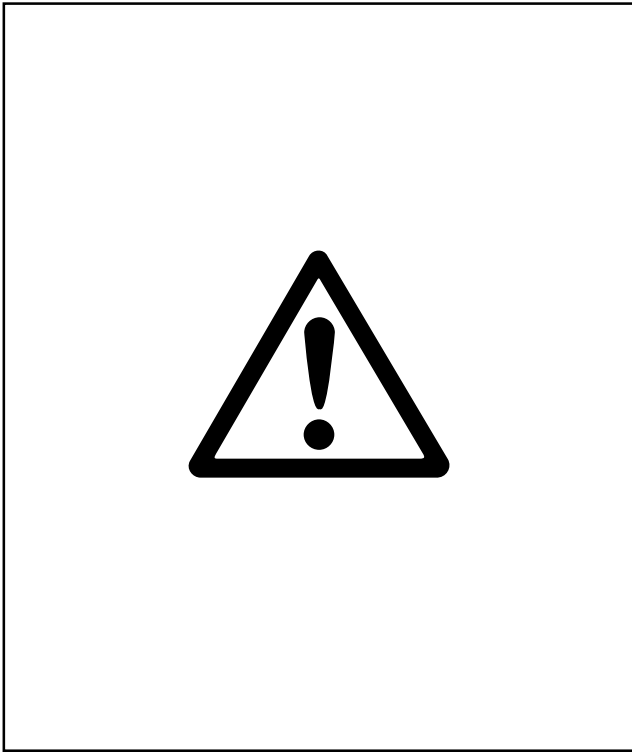
METTLER TOLEDO



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1. Installation

1.1 Preparatory work



Type of fastening

Two fastening kits are available as standard for fastening your wall scale: A wall plug kit for fastening to load-bearing walls and a screw-through kit for screw-through mounting, see operating instructions.

Selection of the appropriate fastening kit is the responsibility of the building specialist, who must take into consideration the specifications in the supporting force diagrams, the wall stability under load and the wall construction material, see section 4.

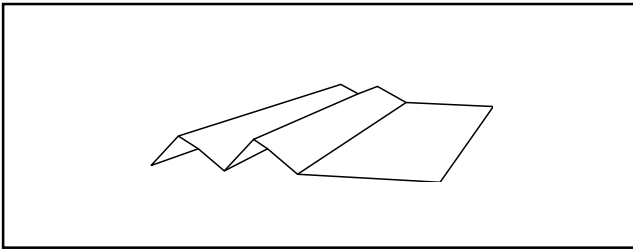
Caution

Mettler-Toledo (Albstadt) GmbH accepts no responsibility whatsoever regarding wall fastening of the scale.

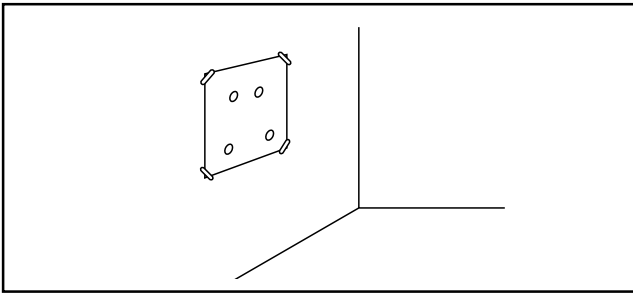
If the fastening kits supplied by METTLER TOLEDO are used, the specifications in the Appendix must also be observed and verified by a building specialist. Even in this case, as Mettler-Toledo (Albstadt) GmbH has no knowledge of the local conditions it can accept no responsibility for the fastening.

The engineers of the METTLER TOLEDO service organisation are directed to have the checks verified by a building specialist.

1.2 Installing the wall plates and brackets



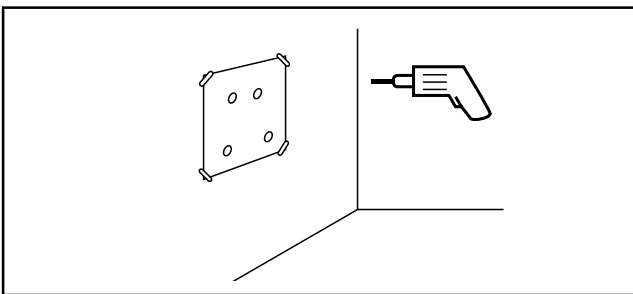
Each fastening kit includes a drawing for use as a drilling template for drilling out the mounting holes. Pay special attention to the mounting information on the drawing before starting the work. The fastening kits include all fastening elements.



- Fix drawing to wall at planned location of scale using adhesive tape.

Note

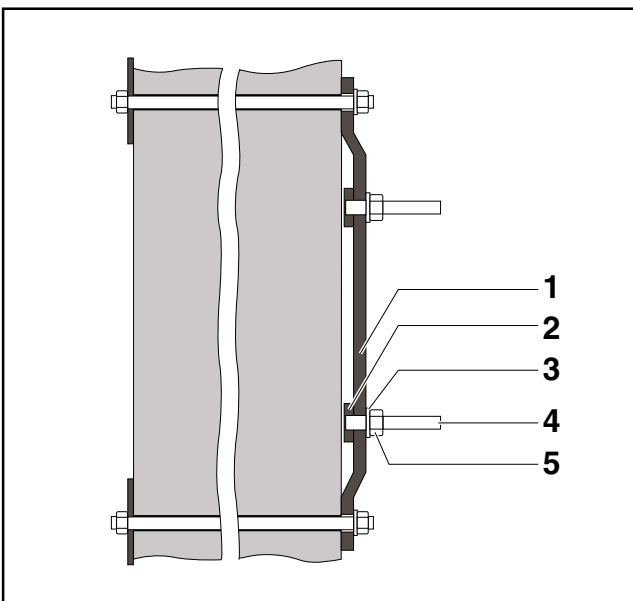
Take into consideration the location of the cantilever arm and the height of the hinged plate, see section 3.



- Drill out the marked mounting holes.

Drill hole diameter

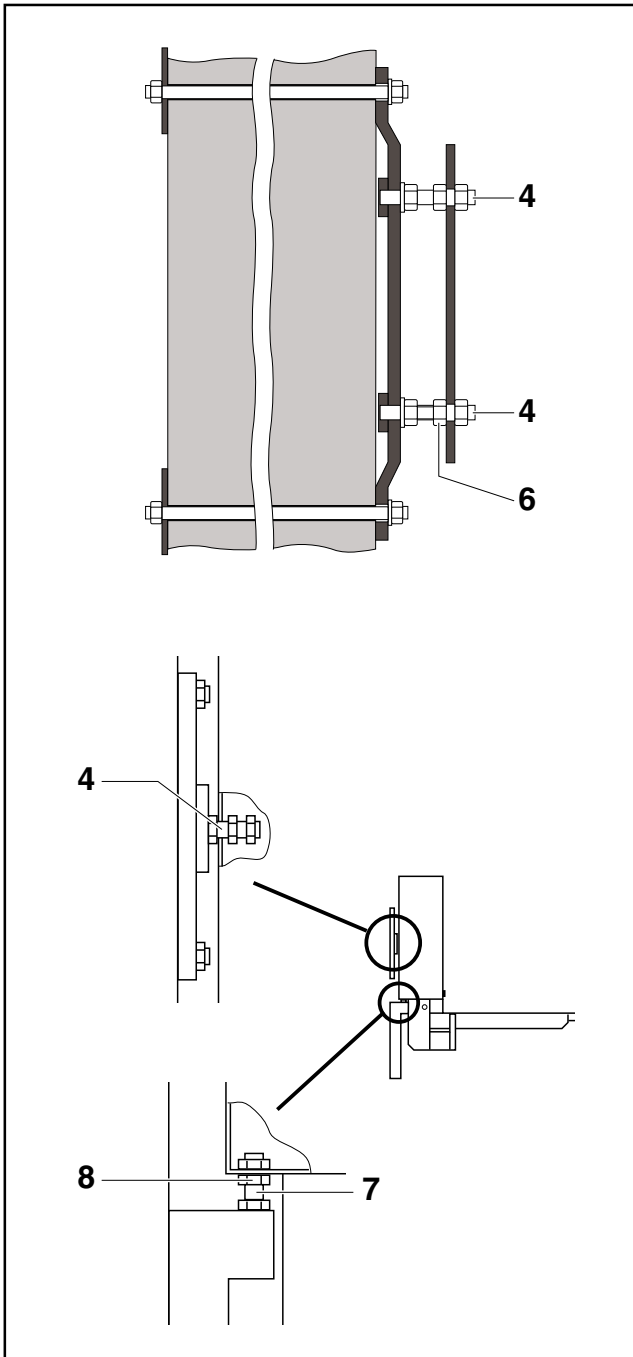
Wall plug kit	14 mm
Screw-through kit	12 mm



- Fasten both suspension bolts (4) with flange nut (2), washer (3) and nut (5) in the wall plate (1).

- Fix wall plate and brackets to wall with appropriate fastening elements.

1.3 Mounting and screwing on the scale / Levelling



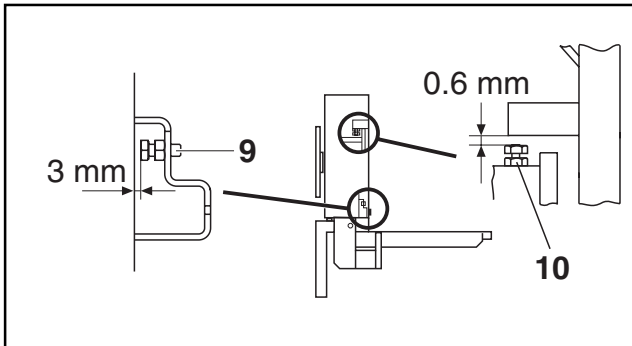
Mounting and screwing on

- Unscrew fastener screws from housing, remove housing.
- Screw locking nuts (6) onto the two suspension bolts (4).
- Insert scale with the two bracket support bolts (7) into the brackets and secure with nuts and washers.

Levelling

- Align the scale using the nuts (8) at the two bracket support bolts (7).
Use a spirit level on the load plate to align scale.
- If necessary, correct the adjustment using the suspension bolts (4).

1.4 Releasing the transport safeguards and adjusting the overload stops



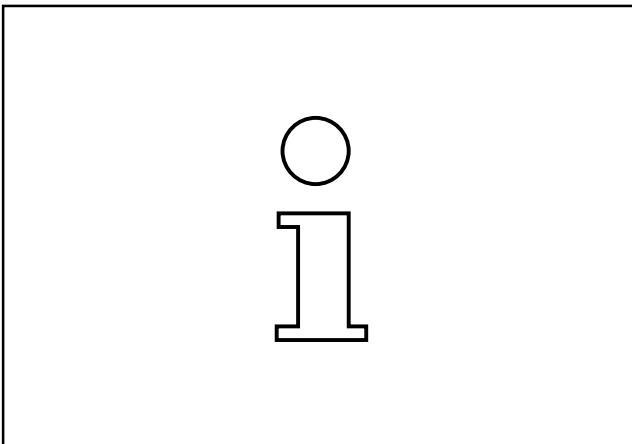
The overload stops also act as transport safeguards.

- Unscrew lower overload stops (9) and set distance to 3 mm.
- Make sure that the upper overload stops (10) are set to a distance of 0.6 mm.
- Mount housing and fasten with the appropriate screws.

1.5 Routing the connection cable



- Route connection cable to terminal so that it is protected against possible damage.



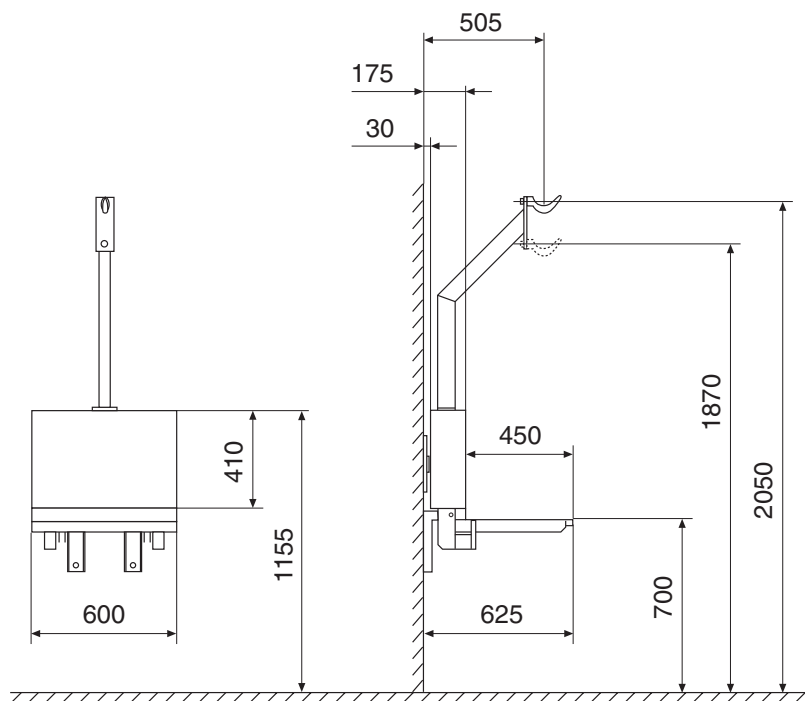
This concludes the installation work for the wall scale. Now continue in accordance with the directions in the "Installation" section of the terminal operating instructions.

The connection cable has a length of 2.5 m. For remote setup of the **DW150** wall scale from the terminal, the cable can be extended up to max. 100 m (see operating instructions). With the **DW150T** wall scale a cable extension is not possible.

2. Configuration data

	Configuration SingleRange
Maximum capacity	150 kg
Readability	0.05 kg
Taring range (by subtraction)	150 kg
Preload range	
Zero setting range	±3 kg
Preload range	27 kg
Certification data following OIML	
Certification class	III
Certification value	0.05 kg
Minimum load	1 kg
Temperature range	-10 ... +40 °C

3. Dimensions



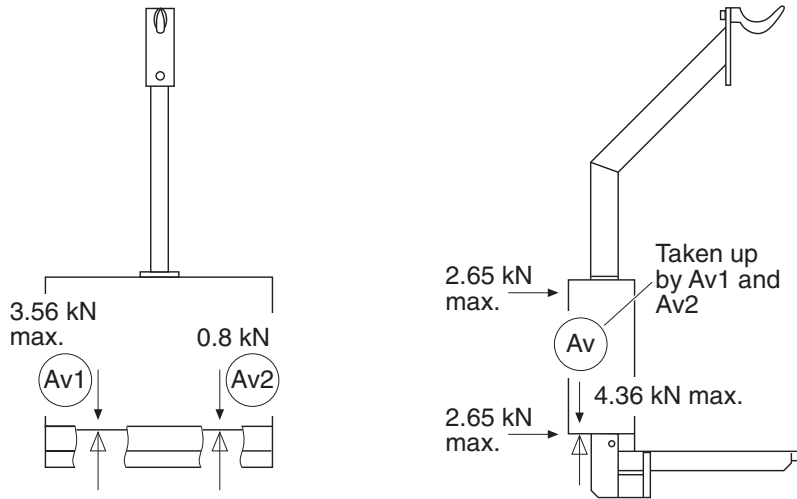
Dimensions in mm

4. Appendix

4.1 Supporting force diagrams

Supporting forces at the scale fastening points at max. load

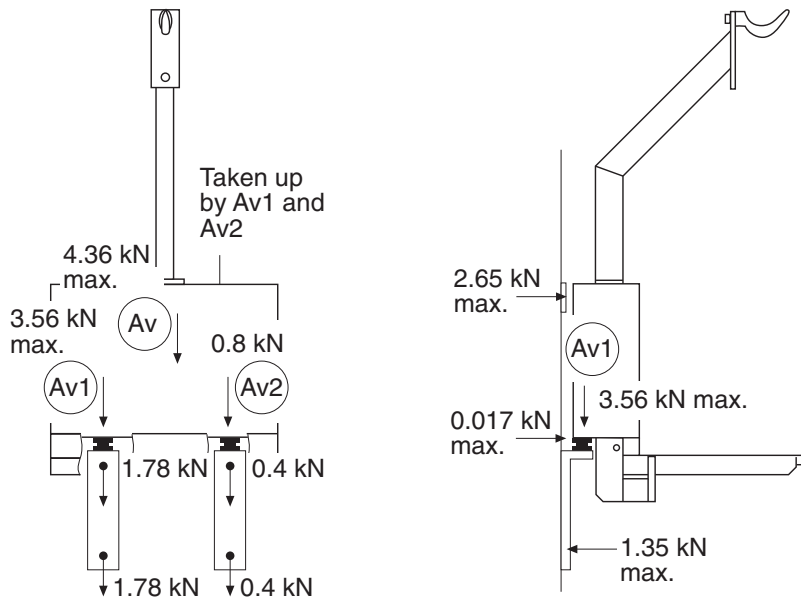
The forces acting on the fastening are shown.



Max. bearing pressure of max. 3.56 kN can also appear at Av2.

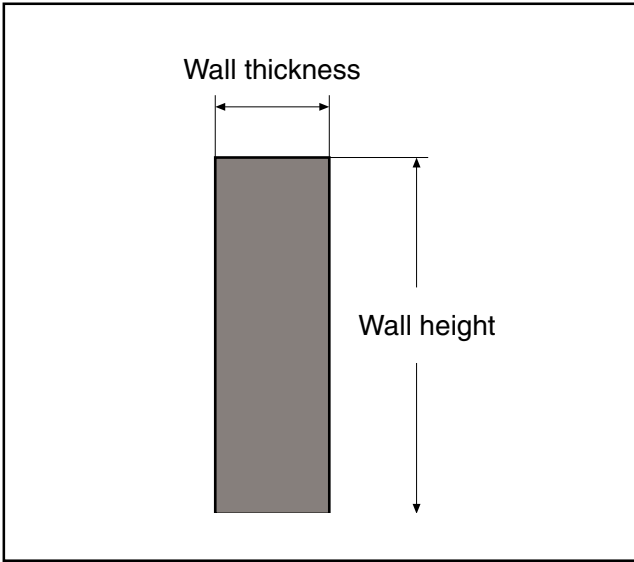
Supporting forces at the wall at max. load

The forces acting on the fastening are shown.



Max. bearing pressure of max. 3.56 kN can also appear at Av2.

4.2 Wall stability under load



Concrete walls

Owing to the different wall thicknesses, quality of the concrete and steel reinforcements, it is not possible to give general directions for concrete walls. Should doubts arise regarding the stability, transmission of the forces must be established for the case in question.

Brick walls

- **Wall thickness** (without plaster, tiles, insulation, etc.)
min. 17.5 cm

- **Slenderness** (wall height in cm/wall thickness in cm)
max. 14

With a wall thickness of 17.5 cm, this gives a maximum wall height of 245 cm. Higher walls must be correspondingly thicker.

- **Ceiling loading** on the fastening wall
approx. 1600 kg/m (16 kN/m)

If this value is not known or is nowhere near reached, the wall scale may be fastened only after the customer has furnished proof of a static test.

4.3 Wall construction materials

	Screw-through kit	Wall plug kit
Concrete \geq B15	X	X
Limestone masonry \geq KSV12	X	X
Solid brick masonry	X	X
Other building stone	X	–

The type of fastening – with screw-through kit or wall plug kit – depends on the construction material of the wall.



- When the wall plug kit is used, there must be no insulation layer on the plug side of the wall and the plaster or tile thickness must not exceed 60 mm.
- When the screw-through kit is used, neither side of the wall may have an insulation layer.



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Mettler-Toledo (Albstadt) GmbH

D-72458 Albstadt

Tel. ++49-7431-14 0, Fax ++49-7431-14 232

Internet: <http://www.mt.com>