Deutsches Institut für Bautechnik

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European Technical Assessment Body for construction products

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European Technical Assessment ETA-24/1126 of 25 June 2025

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the European Technical Assessment:	Deutsches Institut für Bautechnik
Trade name of the construction product	IMEDCO steel hat profile 140x27
Product family to which the construction product belongs	Products for installation systems for supporting technical building equipment
Manufacturer	IMEDCO AG Industriestrasse West 14 4614 HÄGENDORF SCHWEIZ
Manufacturing plant	L 1052 and L 1353
This European Technical Assessment contains	6 pages including 2 annexes which form an integral part of this assessment
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of	EAD 280016-00-0602 (Version 2020)

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Specific part

1 Technical description of the product

The IMEDCO steel hat profile 140x27 consists of 4mm thick continuously hot-dip galvanised sheet steel DX51D+Z275 MA-C in accordance with EN 10346, with a min. yield strength of 170 N/mm² specified from manufacturer. According to EN 10346, the Z275 coating code corresponds to a theoretical zinc coating thickness of 20 µm.

The lengths are 2 m and 3 m.

There are two different types of slotted holes alternating at 62,5 mm intervals in the back of the channel (72 mm x 12 mm longitudinal and 42 mm x 12 mm transverse), booth flanges have M10 threaded holes every 250 mm, see Annex 1.

2 Specification of the intended use in accordance with the applicable European Assessment Document

The IMEDCO steel top-hat profile 140x27 is used in dry indoor areas for fixing:

a) sprinkler kits

b) technical building equipment in general

c) pipework for water that is not intended for human consumption

d) pipework for gases and fuels for heating and cooling buildings

The performances in section 3 can only be assumed if the IMEDCO steel hat profile 140x27 is used with galvanized:

- Bolt EN ISO 4017, M10, strength class 8.8,
- Nut ISO 4032, M10 strength class 8,
- Washer EN ISO 7089 10,5, hardness 200HV
- and a tightening torque of 45 Nm.

A4 stainless steel fasteners were used in the fire test.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the IMEDCO steel hat profile 140x27 of at least 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

No.	Essential characteristic	Performance		
1	Reaction to fire	Class A1		
2	Pull-through resistance of channel back holes under fire exposure		72 mm x 12 mm	42 mm x 12 mm
		$F_{Rk,30}$	2,64 kN	2,64 kN
		$F_{Rk,60}$	1,16 kN	1,39 kN
		$F_{Rk,90}$	0,66 kN	0,98 kN
		$F_{Rk,120}$	0,42 kN	0,77 kN
3	Bending characteristics under fire exposure	No performance assessed		

3.2 Safety and accessibility in use (BWR 4)

No.	Essential characteristic	Performance
4	shape	Hat-shaped
5	Dimension	Width: 140 mm, height: 27 mm Lengths: 2 m and 3 m
6	Material	Zinc-coated steel (DX51D+Z275 MA-C acc. EN 10346, min. yield strength 170 N/mm²)
	Cross-section characteristics	No performance assessed
7	Characteristic pull-through resistance of channel back holes	72 mm x 12 mm: 8,39 kN 42 mm x 12 mm: 10,28 kN

4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with the European Assessment Document EAD 280016-00-0602, the following legal bases apply for assessment and verification of constancy of performance:

Intended use	System	Legal base, decision of EU-Commission
a) For the support of fire-fighting systems	1	96/577/EC, amended 2002/592/EC
b) For the support of technical building equipment in general	2+	97/161/EC
c) For supporting pipes for the transport of water not intended for human consumption	4	1999/472/EC, amended 2001/596/EC
d) For supporting pipes for the transport of gas/fuel intended for the supply of building heating/cooling systems	3	

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

For the implementation of the system of assessement and verification of constancy of performance, each batch produced shall be checked for

- Compliance with dimensions and tolerances (see Annex 1, for undefined dimensions ISO 2768-1:1991-06 tolerance class: mK)
- Compliance with the material specifications, zinc coating thickness and minimum yield strength of 170 N/mm²

There is no deposited control plan.

Issued in Berlin on 25 June 2025 by Deutsches Institut für Bautechnik

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Head of Section

beglaubigt:
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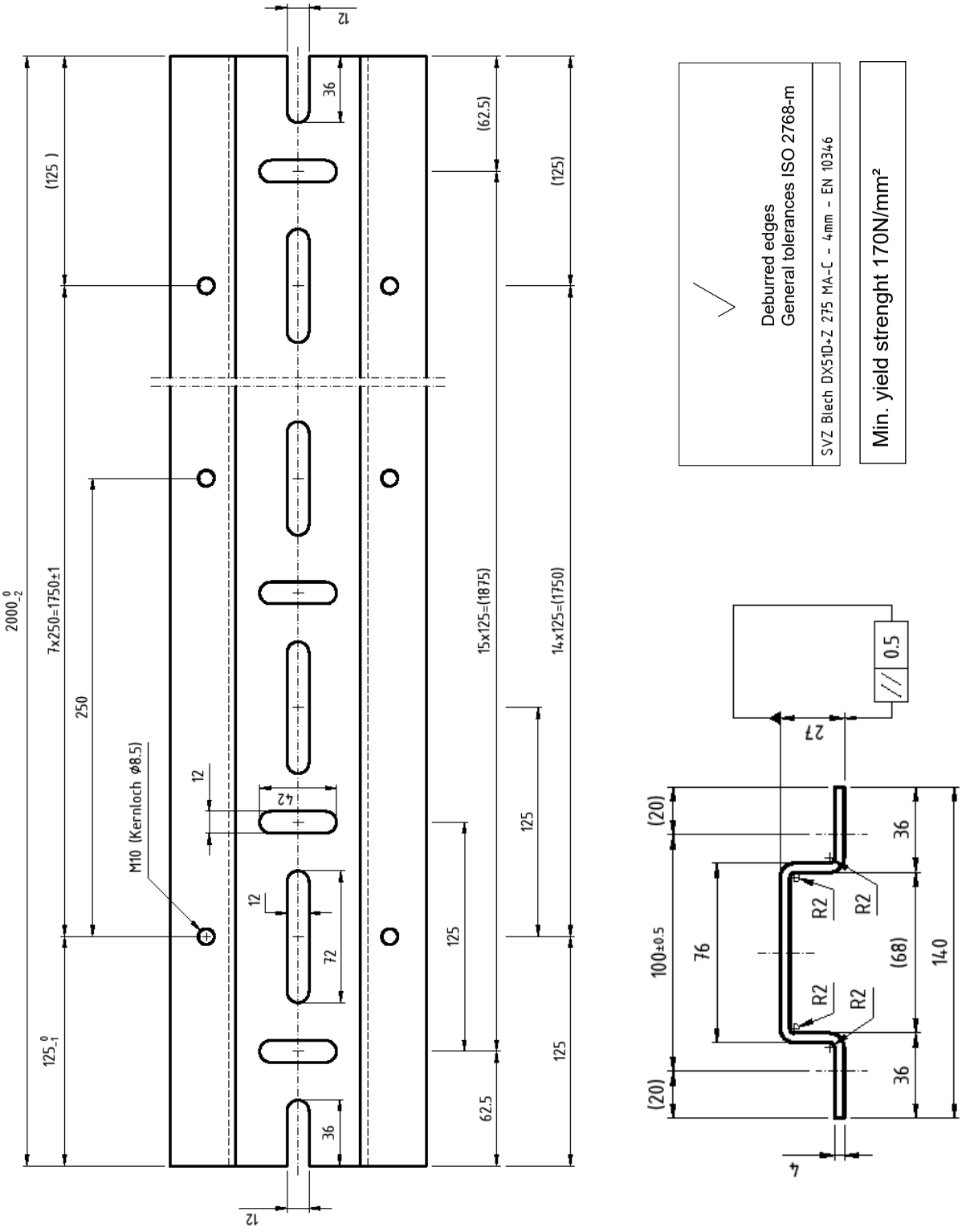

IMEDCO steel hat profile 140x27	Annex 1
Drawing of product	

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IMEDCO steel hat profile 140x27

Cross-section characteristics

Annex 2

Type of cross-section	**1) without hole**	**2) slotted whole lengthwise**	**3) slotted hole crosswise**	**4) slotted hole lengthwise and 2x threaded hole**
Cross-section area A [mm²]	716,5	668,5	548,5	588,5
Center of gravity Z_s [mm]	13,8	12,9	10,3	14,4
Moment of inertia I_y [mm⁴]	79.280	72.713	51.315	61.711
Moment of inertia I_z [mm⁴]	1.117.745	1.117.169	1.093.049	916.502
Moment of resistance W_y [mm³]	5.763	5.175	3.075	4.274
Moment of resistance W_z [mm³]	15.968	15.960	15.615	13.093