CONSTRUCTION PRODUCTS

Declaration of Performance
DoP-CULL-001-2021

ITW Construction Products
1 Wheatstone Place, Southfield Industrial Estate,
Glenrothes, Fife KY6 2SW

t +44(0)1592 771132
f +44(0)1592 771182
e orders@itwcp.com
w www.itwcp-offsite.co.uk

DoP-CULL-001-2021 (Issue-4)

1. Product Type:	Masonry Joist Hangers, Masonry/Timber Restraint Straps and Timber Frame Wall Ties
2. Identification:	JHI, JHIR, RB-JHI, RB-JHIR, FMHI, FMHIR, RA, HRAD, RADS, VSM, PFS, PST, PSC, PSB, HDGS, LDGS, VRS, ST-PFS-50-100, ST-PFS-50-100-M, RST, FT, HMT, MASONRY-STD-6mm, MASONRY-RTN-6mm, MASONRY-STD-8mm and MASONRY-RTN-8mm
3. Intended use:	To support timber joists, beams, engineered wood products and trussed rafters onto masonry walls For connecting masonry leaf to timber joists and roof trusses to provide lateral restraint to masonry walls For holding timber wall plates, trusses, joists etc to blockwork or timber frame panels For connecting masonry external leaf to timber frame inner leaf, ties to be nailed through OSB timber frame sheathing into vertical timber studs
4. Manufacturer:	ITW Ltd, 1 Wheatstone Place, Southfield Industrial Estate, Glenrothes, Fife. KY6 2SW
5. Authorised representative:	N/A
6. System of assessment:	System 3
7. Notified bodies / Technical Assessment body:	Lucideon, Queens Road, Penkhull, Stoke-on-Trent ST4 7LQ UK Notified body no.0006 Technicky A Zkusebni USTAV Stavebni Praha s.p., Prosecka 811/76a, 190 00 Praha 9, Czech Republic Notified body no.1020 EN845-1:2013+A1:2016 – Specification for ancillary components for masonry – Part 1: Ties, tension straps, hangers and brackets.
8. Declared performance:	The undersigned, representing the following: **please refer to Annex A tables 1, 2 & 3**

9. The performance of the products identified in points 1, 2 & 3 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:

Scott McAndrew – Engineer / R&D Manager ITW Industry

Glenrothes, Fife, UK – 11/06/2025
(place and date of issue)

Scott McAndrew
(signature)

Annex A

Table 1 – Masonry hangers

Identification	Intended use	Essential Characteristics				
		Declared value of vertical load capacity (kN)	Declared mean displacement / deflection (mm)	Material (EN10346)	Corrosion protection (EN 845-1 Table A.1)	Technical Specification
JHI (39 to 100mm wide & 150 to 400mm deep)	To support timber joists, beams, engineered wood products and trussed rafters onto masonry walls	15.52(1)(3) 23.04(1)(4)	0.7(2) 1.11(2)	2mm steel grade S250GD	Z600 (15)	EN 845-1
JHIR (39 to 100mm wide & 150 to 400mm deep)		15.52(1)(3) 23.04(1)(4)	0.7(2) 1.11(2)	2mm steel grade S250GD	Z600 (15)	EN 845-1
FMHI (39 to 100mm wide & 150 to 400mm deep)		26.28(1)(3) 43.19(1)(4)	0.75(2) 0.73(2)	3 & 4mm steel grade S275JR	Material coating zinc phosphate undercoat with an organic bituminous topcoat (12.1)	EN 845-1
FMHIR (39 to 100mm wide & 150 to 400mm deep)		26.28(1)(3) 43.19(1)(4)	0.75(2) 0.73(2)	3 & 4mm steel grade S275JR	Material coating zinc phosphate undercoat with an organic bituminous topcoat (12.1)	EN 845-1
RB-JHI (39 to 100mm wide & 150 to 400mm deep)		17.46(3)(5) 23.31(4)(5)	1.0(2) 1.0(2)	2mm / 3mm steel grade S250GD	Z600 (15)	EN 845-1
RB-JHIR (39 to 100mm wide & 150 to 400mm deep)		22.07(3)(5) 31.45(3)(5)	1.0(2) 1.0(2)	2mm / 3mm steel grade S250GD	Z600 (15)	EN 845-1
RA		12.64(3)(5) 12.64(4)(5)	1.5(2) 1.5(2)	2.5mm steel grade S250GD	Z600 (15)	EN 845-1
HRAD		36.0(3)(5) 36.0(4)(5)	2.0(2) 2.0(2)	3.0mm steel grade S250GD	Z600 (15)	EN 845-1
RADS (30deg to 87.5deg available in 2.5deg increments)		15.60(3)(5) 15.60(4)(5)	1.5(2) 1.5(2)	3.0mm steel grade S250GD	Z600 (15)	EN 845-1
VSM		10.50(1)(3) 10.50(1)(4)	2.0(2) 2.0(2)	2.0mm steel grade S250GD	Z600 (15)	EN 845-1
MASONRY-STD-6mm (39 to 300mm wide & 150 to 400mm deep)		38.0(3)(5) 50.0(3)(5)	undeclared	6mm steel grade S275JR	Material coating zinc phosphate undercoat with an organic bituminous topcoat (12.1)	EN 845-1
MASONRY-RTN-6mm (39 to 300mm wide & 150 to 400mm deep)		38.0(3)(5) 50.0(3)(5)	undeclared	6mm steel grade S275JR	Material coating zinc phosphate undercoat with an organic bituminous topcoat (12.1)	EN 845-1
MASONRY-STD-8mm (39 to 300mm wide & 150 to 400mm deep)		42.0(3)(5) 50.0(3)(5)	undeclared	8mm steel grade S275JR	Material coating zinc phosphate undercoat with an organic bituminous topcoat (12.1)	EN 845-1
MASONRY-RTN-8mm (39 to 300mm wide & 150 to 400mm deep)		42.0(3)(5) 60.0(3)(5)	undeclared	8mm steel grade S275JR	Material coating zinc phosphate undercoat with an organic bituminous topcoat (12.1)	EN 845-1

(1) Declared value for hangers tested with 3 courses (675mm) of cured blockwork above masonry flange
(2) 1/3 of declared value
(3) 3.5N/mm2 masonry strength
(4) 7N/mm2 masonry strength
(5) Declared value for hangers tested with no blockwork above masonry flange

Table 2 – Restraint straps

Identification	Intended Use	Essential Characteristics				
		Declared value of vertical load capacity (kN)	Declared mean displacement / deflection (mm)	Material (EN10346)	Corrosion protection (EN 845-1 Table A.1)	Technical Specification
PFS	For connecting masonry leaf to timber joists and roof trusses to provide lateral restraint to masonry walls	8.8(1)	2.0(2)	Steel grade S250GD	Z600 (15) or Z275 (17)	EN 845-1
PST		8.8(1)	2.0(2)	Steel grade S250GD	Z600 (15)	EN 845-1
PSC		8.8(1)	2.0(2)	Steel grade S250GD	Z600 (15)	EN 845-1
PSB		8.8(1)	2.0(2)	Steel grade S250GD	Z600 (15)	EN 845-1
HDGS		10.57(1)	2.0(2)	Steel grade S250GD	Z275 (17)	EN 845-1
ST-PFS-50-100		6.9(5)	2.0(2)	Austenitic stainless steel	Austenitic stainless steel (1)	EN 845-1
ST-PFS-50-100-M		5.4(5)	2.0(2)	Austenitic stainless steel	Austenitic stainless steel (1)	EN 845-1
LDGS	For holding timber wall plates, trusses, joists etc to blockwork or timber frame panels	2.8(3)	1.0(2)	Steel grade S250GD	Z275 (17)	EN 845-1
VRS		4.8(3)	1.0(2)	Steel grade S250GD	Z600 (15)	EN 845-1
RST		11.8(6)	Undeclared	Steel grade S250GD	Z275 (21)	EN 845-1

(1) Declared value for restraint strap tested on 28day cured blockwork with a 10kN/m pre-compression load applied for duration of the test
(2) 1/3 of declared value
(3) Fixed to timber wallplate
(4) Declared value for restraint strap fixed to minimum 3.5N/mm2 blockwork. Vertical capacity will vary depending on masonry strength, number and type of fixings used to the masonry
(5) Declared value for straps when used within timber kits with C26 minimum timber grade and minimum 6no. fixings
(6) Declared value for restraint strap is based on tensile capacity of the steel, capacity will vary depending on masonry / timber strength and number and type of fixings used

Table 3 – Timber frame wall ties

Identification	Intended Use	Essential Characteristics				
		Declared value of vertical load capacity (kN)	Declared mean displacement / deflection (mm)	Material (EN10346)	Corrosion protection (EN 845-1 Table A.1)	Technical Specification
FT-50	For connecting masonry external leaf to timber frame inner leaf, ties to be nailed through OSB timber frame sheathing into vertical timber studs	0.612(compression)(2) 0.648(tension)(2) 1.836(compression)(3) 0.954(tension)(3)	1.0(1)	Austenitic stainless steel	Austenitic stainless steel (1)	EN 845-1
FT-75		0.504(compression)(2) 0.672(tension)(2) 2.265(compression)(3) 0.786(tension)(3)	1.0(1)	Austenitic stainless steel	Austenitic stainless steel (1)	EN 845-1
FT-100		0.504(compression)(2) 0.756(tension)(2) 0.943(compression)(3) 1.417(tension)(3)	1.0(1)	Austenitic stainless steel	Austenitic stainless steel (1)	EN 845-1
FT-125-150		0.551(compression)(2) 0.780(tension)(2) 0.510(compression)(3) 2.660(tension)(3)	1.0(1)	Austenitic stainless steel	Austenitic stainless steel (1)	EN 845-1
HMT-50		1.705(compression)(2) 0.895(tension)(2) 2.176(compression)(3) 2.376(tension)(3)	1.0(1)	Austenitic stainless steel	Austenitic stainless steel (1)	EN 845-1

(1) 1/3 of declared value
(2) Timber end
(3) Masonry end