

No: DoPM20-SA

Issue: Release 2022/09/01

1. Product type

MiTek M20 Connector Plate

2. Product identification

M20

3. Intended Use

Punched metal plate fasteners for structural timber products

4. Manufacturer

MiTek Industries South Africa (Pty) Limited, 754 16th Road, Randjespark, Halfway House, Gauteng, South Africa, 1685.

5. Authorized representative

N/A

6. Attestation Of Conformity System

AVCP Class 2+

7. Technical specification - hEN

Harmonized Standard

EN 14545:2008

Certificate of factory production control (FPC)

2812-CPR-20004

Initial assessment of FPC

2812- Element Materials Technology Rotterdam, B.V.

Continuous assessment of FPC

2812- Element Materials Technology Rotterdam, B.V.

8. Technical specification - ETA

N/A

9. Declared performance

Essential characteristics	Performance	Harmonised technical specification
Steel	S250GD + Z275 NAC/MAC/MBC	EN 10143:2006 & EN 10346:2015
Thickness	1.0 mm	EN 14545:2008
Characteristic plate anchorage capacity / Solid and glued laminated timber with characteristic density of $\rho_k = 350 \text{ kg/m}^3$	$f_{a,0,0} = 2,82 \text{ N/mm}^2$ $f_{a,90,90} = 1,50 \text{ N/mm}^2$ $k_1 = -0,0061$ $k_2 = 0,0170$ $\alpha_0 = 59,4^\circ$	
Characteristic plate tension, compression and shear capacity	$f_{t,0} = 148 \text{ N/mm}$; $f_{t,90} = 136 \text{ N/mm}$ $f_{c,0} = 76 \text{ N/mm}$; $f_{c,90} = 88 \text{ N/mm}$ $f_{v,0} = 69 \text{ N/mm}$; $f_{v,90} = 43 \text{ N/mm}$ $\gamma_0 = -2,1^\circ$; $k_v = 0,87$	
Slip modulus with mean timber density $\rho_m = 420 \text{ kg/m}^3$	$k_{ser, mean} = 14,7 \text{ N/mm}^3$	
Nail root ductility	Passed	
Minimum timber thickness	35 mm	EN1995-1-1
Durability, Corrosion protection	Z275 Hot-dip zinc coating	
Service Class	2	

- 10.** The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. 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: **MiTek Industries South Africa Pty Ltd.**