# Split Joist Hangers GALVANISED

## **Application**

The Bremick<sup>®</sup> Split Joist Hangers are typically used to provide a heavy-duty connection for non-standard solid timber beam widths to supporting beams. Common applications include beam to beam, waling plate to stud and corner beam connections, where clearance is required.

### **Advantages**

The Bremick<sup>®</sup> Joist Hangers provides numerous benefits including:

- **Cost effective.** Simple method of connecting two heavily loaded timber members while achieving the required design loads, without the need for costly onsite skilled labour constructing special jointing connections.
- Efficient. Quickly and easily connects the two timber members into a structurally sound application using Bremick Type 17 12-gauge screws.
- **Flexibility.** 200mm width and 300mm bracket length accommodates typical heavy beams of varying widths.
- Easy. No requirement to select a hanger to suit the beam width.

## **Specifications**

| Steel Grade | G300  | AS1684 &            |
|-------------|---|---------------------|
| Coating     | Z275 – Galvanised                                       | AS1720<br>Compliant |
| Thickness   | 2.0mm   | ineered Pers        |
| Width A     | 70mm, 107mm   |                     |
| Width B     | 80mm  |                     |
| Length      | 215mm, 300mm  | egneilding a        |
| Fasteners   | Bremick <sup>®</sup> Type 17,<br>12g x 35mm/65mm Screws |                     |

## **Bremick® Ranging**

| Product Code  | Dimensions                   | Coating           | Pack Qty |   |
|---------------|------------------------------|-------------------|----------|---|
| TJPG200000204 | 215mm x 70mm x 80mm x 2.0mm  | Z275 – Galvanised | 5 pairs  | 2 |
| TJPG300000204 | 300mm x 107mm x 80mm x 2.0mm | Z275 – Galvanised | 5 pairs  |   |



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Locate the first split joist hanger into position on the supporting beam (Beam A). As per **figure 1.** Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the supporting beam (Beam A).

### 4

- Locate supported beam (Beam B) into the split joist hanger, so that it is sitting firmly against the supporting beam (Beam A).
- Note the beam must be at least 200mm deep. The bracket must cover at least 60% of the beam's depth.

Measured the required distance between the two split joist hangers. Then locate the second split hanger into position on the supporting beam (Beam A). Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the supporting beam (Beam A).

### 5

Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes with the fasteners and fix off into the supported timber member (Beam B). When fastening into double laminated beams, use fasteners of at least 65mm.

# **BREMICK**<sup>®</sup>

# **Installation Instructions**

Stacked on one side



Locate the first split joist hanger into position on the supporting beam (Beam A). As per **figure 2**. Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the supporting beam (Beam A).

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Locate supported beam (Beam B) into the split joist hanger, so that it is sitting firmly against the supporting beam (Beam A) and the tabs of the split joist hangers are sitting snug against the top and bottom of Beam B. Measured the required distance between the two split joist hangers. Then locate the second split hanger into position on the supporting beam (Beam A). As per **figure 2**. Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the supporting beam (Beam A).

### 5

Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes with the fasteners and fix off into the supported timber member (Beam B). When fastening into double laminated beams, use fasteners of at least 65mm.

# **Installation Instructions**

Waling Plate Connection



Locate the first split joist hanger into position on the waling plate (Beam A) and the second flange sits against the stud (Beam B). As per figure 3.

Using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the waling plate. Then, using Bremick Type 17 12-gauge screws (use the number as per the table below) locate into the pre-punched holes within the joist hanger's flange and fix off into the stud.

Repeat steps above for the second split joist hanger.

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**Fixing Table** 

|                     | Fixing To                  |                           |  |  |  |
|---------------------|----------------------------|---------------------------|--|--|--|
| Joist Hanger Length | Supporting Member (Beam A) | Supported Member (Beam B) |  |  |  |
| (mm)                | Type 17, 12 Gauge Screw    | Type 17, 12 Gauge Screw   |  |  |  |
|                     | Standard                   |                           |  |  |  |
| 200mm               | 10                         | 8                         |  |  |  |
| 300mm               | 16                         | 12                        |  |  |  |
|                     | Stacked                    |                           |  |  |  |
| 200mm               | 12                         | 10                        |  |  |  |
| 300mm               | 18                         | 14                        |  |  |  |
|                     | Waling Plate               |                           |  |  |  |
| 200mm               | 8                          | 6                         |  |  |  |
| 300mm               | 12                         | 10                        |  |  |  |



# **Technical Data**

# **SPLIT JOIST HANGER**

#### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 1** CAPACITY: FOR 10/12 gauge SCREWS x 50mm USED IN EACH WING AND 11/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

|             | CODE                            | PRODUCT      | HEIGHT (mm)   | THICKNESS (mm)   |      |      |
|-------------|---------------------------------|--------------|---------------|------------------|------|------|
|             | TJPG200000204                   | JOIST HANGER | 215           | 2                |      |      |
|             |                                 |              |               |                  |      |      |
|             |                                 |              | Seasoned Timb | er Capacity (kN) |      |      |
| JOINT GROUP | JD6                             | JD5          | JD4           | JD3              | JD2  | JD1  |
|             | 3.2                             | 4.4          | 6.3           | 8.8              | 11.2 | 14.9 |
|             | Unseasoned Timber Capacity (kN) |              |               |                  |      |      |
| JOINT GROUP | J6                              | J5           | J4            | J3               | J2   | J1   |
|             | 2.1                             | 3.2          | 4.4           | 6.3              | 8.8  | 11.2 |

#### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 2** CAPACITY: FOR 10/12 gauge SCREWS x 50mm USED IN EACH WING AND 11/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

|             | CODE          | PRODUCT      | HEIGHT (mm)    | THICKNESS (mm)    |      |      |
|-------------|---------------|--------------|----------------|-------------------|------|------|
|             | TJPG200000204 | JOIST HANGER | 215            | 2                 |      |      |
|             |               |              |                |                   |      |      |
|             |               |              | Seasoned Timb  | er Capacity (kN)  |      |      |
| JOINT GROUP | JD6           | JD5          | JD4            | JD3               | JD2  | JD1  |
|             | 3.9           | 5.4          | 7.6            | 10.7              | 13.6 | 18.0 |
|             |               |              | Unseasoned Tim | ber Capacity (kN) |      |      |
| JOINT GROUP | J6            | J5           | J4             | J3                | J2   | J1   |
|             | 2.5           | 3.9          | 5.4            | 7.6               | 10.7 | 13.6 |

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 3** CAPACITY: FOR 10/12 gauge SCREWS x 50mm USED IN EACH WING AND 11/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

|             | CODE          | PRODUCT      | HEIGHT (mm)    | THICKNESS (mm)    |      |      |
|-------------|---------------|--------------|----------------|-------------------|------|------|
|             | TJPG200000204 | JOIST HANGER | 215            | 2                 |      |      |
|             |               |              |                |                   |      |      |
|             |               |              | Seasoned Timb  | er Capacity (kN)  |      |      |
| JOINT GROUP | JD6           | JD5          | JD4            | JD3               | JD2  | JD1  |
|             | 4.4           | 6.0          | 8.5            | 11.9              | 15.1 | 20.1 |
|             |               |              | Unseasoned Tim | per Capacity (kN) |      |      |
| JOINT GROUP | J6            | J5           | J4             | J3                | J2   | J1   |
|             | 2.8           | 4.4          | 6.0            | 8.5               | 11.9 | 15.1 |

#### REMARKS

- Use only Bremick screws with shank a close fit in all of the screw holes.
- The maximum permissible gap between supported member and face of supporting member 2mm
- Values for Category 1 (secondary members.) Values x 0.94 for Category 2 (primary members) and Category 3 Values x 0.88 for post disaster structures primary members
- Values for 35mm screws multiply values by 0.84
- When the two connected timber are of different joint groups use the lowest joint group when using these tables

# **SPLIT JOIST HANGER**

### LIMIT STATE SHEAR CAPACITY (1.35G IE DOWNWARDS DEAD LOADS PLUS PERMANENT LIVE LOADS)

**TABLE 4** CAPACITY: FOR 12/12 gauge SCREWS x 50mm USED IN EACH WING AND 15/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

|             | CODE                            | PRODUCT      | HEIGHT (mm)  | THICKNESS (mm)   |      |      |
|-------------|---------------------------------|--------------|--------------|------------------|------|------|
|             | TJPG300000204                   | JOIST HANGER | 300          | 2                |      |      |
|             |                                 |              |              |                  |      |      |
|             |                                 |              | Seasoned Hmb | er capacity (kn) |      |      |
| JOINT GROUP | JD6                             | JD5          | JD4          | JD3              | JD2  | JD1  |
|             | 6.1                             | 8.3          | 11.7         | 16.5             | 20.9 | 27.8 |
|             | Unseasoned Timber Capacity (kN) |              |              |                  |      |      |
| JOINT GROUP | J6                              | J5           | J4           | J3               | J2   | J1   |
|             | 3.9                             | 6.1          | 8.3          | 11.7             | 16.5 | 20.9 |

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QF IE DOWNWARDS DEAD PLUS FLOOR LIVE LOADS)

**TABLE 5** CAPACITY: FOR 12/12 gauge SCREWS x 50mm USED IN EACH WING AND 15/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

|             | CODE          | PRODUCT      | HEIGHT (mm)    | THICKNESS (mm)    |      |      |
|-------------|---------------|--------------|----------------|-------------------|------|------|
|             | TJPG300000204 | JOIST HANGER | 300            | 2                 |      |      |
|             |               |              |                |                   |      |      |
|             |               |              | Seasoned Timb  | er Capacity (kN)  |      |      |
| JOINT GROUP | JD6           | JD5          | JD4            | JD3               | JD2  | JD1  |
|             | 7.3           | 10.0         | 14.2           | 20.0              | 25.3 | 33.6 |
|             |               |              | Unseasoned Tim | per Capacity (kN) |      |      |
| JOINT GROUP | J6            | J5           | J4             | J3                | J2   | J1   |
|             | 4.7           | 7.3          | 10.0           | 14.2              | 20.0 | 25.3 |

### LIMIT STATE SHEAR CAPACITY (1.2G+1.5QR IE DOWNWARDS DEAD PLUS ROOF LIVE LOADS)

**TABLE 6** CAPACITY: FOR 12/12 gauge SCREWS x 50mm USED IN EACH WING AND 15/12 gauge SCREWS x 50mm TO EACH SIDE OF THE SUPPORTED MEMBER

|             | CODE          | PRODUCT      | HEIGHT (mm)     | THICKNESS (mm)    |      |      |
|-------------|---------------|--------------|-----------------|-------------------|------|------|
|             | TJPG300000204 | JOIST HANGER | 300             | 2                 |      |      |
|             |               |              |                 |                   |      |      |
|             |               |              | Seasoned Timb   | er Capacity (kN)  |      |      |
| JOINT GROUP | JD6           | JD5          | JD4             | JD3               | JD2  | JD1  |
|             | 8.2           | 11.2         | 15.8            | 22.3              | 28.3 | 37.5 |
|             |               |              | Unseasoned Timb | per Capacity (kN) |      |      |
| JOINT GROUP | J6            | J5           | J4              | J3                | J2   | J1   |
|             | 5.3           | 8.2          | 11.2            | 15.8              | 22.3 | 28.3 |

### REMARKS

- Use only Bremick screws with shank a close fit in all of the screw holes.
- The maximum permissible gap between supported member and face of supporting member 2mm
- Values for Category 1 (secondary members.) Values x 0.94 for Category 2 (primary members) and Category 3 Values x 0.88 for post disaster structures primary members
- Values for 35mm screws multiply values by 0.84
- When the two connected timber are of different joint groups use the lowest joint group when using these tables