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Astute Customer  
 Your Company  
 No 1, Your Street  
 Your Town  
 QLD 4000

Dear Sir/Madam

**Reference No.:** 20150803  
**Project Name:** Earthquakes and Pallet Racking  
**Rack Label:** R1

The structural design of the above selective rack has been carried out by Elbowroom (Aust) Pty Ltd using the *Rackman* software developed and authorised by Dematic Pty Ltd.

Dematic certify that the design is in accordance with normal engineering practice and principles, and the relevant standards listed below:

- AS/NZS 1170.0:2002 *Structural design actions. Part 0: General principles*
- AS/NZS 1170.1:2002 *Structural design actions. Part 1: Permanent, imposed and other actions*
- AS 4100:1998 *Steel structures*, Standards Australia
- AS4084-2012 *Steel storage racking*, Standards Australia
- AS/NZS 4600:2005 *Cold-formed steel structures*, Standards Australia.

This certificate is issued on the basis that the approved rack comprises genuine Colby components in new condition, and that the installation is carried out in accordance with Australian Standard AS4084-2012 by an authorised Colby Storage Solutions installer.

Full details of the loads and components that form the basis of the approved structural design are given in Annex A.

This certificate does not create or imply any legal or contractual relationship between Your Company and Dematic Pty Ltd.

Yours sincerely



Murray Clarke, BSc BE PhD  
 MIEAust 391937  
 Structural Design Manager  
 Dematic Pty Ltd

## Annex A — Rack Configuration

**Reference No.:** 20150803  
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Number of bays: 8  
Beam clear entry: 2590 mm  
Beam deflection limit: Span/180  
Sway deflection limit (X): Height/200  
Sway deflection limit (Z): Height/200  
Frame height: 5475 mm  
Frame depth: 840 mm  
RL first horizontal brace: 300 mm  
Frame bracing style: K-braced  
Frame configuration: Double-sided  
Baseplate type: External  
Upright profile: RF9019/G450

Bay Load: 6000 kg

| Beam Level | Beam RL | Pallets per Compartment | Pallet Mass | Compartment Mass | Beam Profile   | Beam Connector | Beam Deflection |
|------------|---------|-------------------------|-------------|------------------|----------------|----------------|-----------------|
| 1          | 1800 mm | 2                       | 1000 kg     | 2000 kg          | BX10015/AB3825 | 4TANG/XF400/80 | 12.9 mm         |
| 2          | 3600 mm | 2                       | 1000 kg     | 2000 kg          | BX10015/AB3825 | 4TANG/XF400/80 | 12.8 mm         |
| 3          | 5400 mm | 2                       | 1000 kg     | 2000 kg          | BX10015/AB3825 | 4TANG/XF400/80 | 13.5 mm         |

For the above specification of components and loads, the structural design is *acceptable*.

Authenticity Code: 717765