



Pavement Jointing System

# Keyjoint Expanda<sup>TM</sup>

**Product Guide** 

Refer to the back of this booklet for contact information.



# Danley™ Keyjoint™

## **Overview**

### **Product Description**

The Keyjoint System facilitates greater control of joints in concrete slabs enabling loads to be transferred between adjoining slabs while allowing lateral movement and limiting vertical differential deflection, that may potentially cause tripping hazards. Keyjoint capping profiles are sold separately.

Keyjoint Expanda<sup>™</sup> is supplied pre-assembled with 5mm close cell expansion foam that provides for thermal expansion of the concrete.



#### **Features & Benefits**

- Galvabond® steel "stay-inplace" formwork system for concrete slabs and pavements.
- Allows lateral movement between the slabs, but limits vertical differential deflection between the slabs.
- Tighter key taper, limits differential vertical deflection than competitive products.
- Pour-through design allows for continuous concrete placement.
- Unique "drive-n-twist" stake system to make installation simple.
- Provides a more uniform ioint line than conventional timber formwork.

- Keyjoint features knock-out holes for 16mm or 20mm square dowels every 150mm. This provides flexibility in centre spacings at 150mm, 300mm, 450mm and 600mm.
- Available in standard 3m lengths to suit four slab thicknesses.
- Ideal for light traffic areas.
- Companion capping available for 3mm recess, 10mm recess, or permanent capping with Rip-A-Strip™ in 2 different colours.
- Fast & easy to install, save time & money on site.
- Keyjoint Expanda™ is supplied with 5mm close cell expansion foam.



Note: Keyjoint & Expanda profiles pictured with optional capping - sold separately.



#### **Environment**





Industrial Pavements Residential Pavements

# **Concrete Slab Joint Dynamics**

#### **Differential deflection** between slabs causes:

- Fatigue between joints.
- Concrete failure at joints.
- Damage to equipment traversing joints.
- Remedial repair.
- High repair costs.

#### **Danley Keyjoint** provides...

- Minimal differential deflection that cause trip hazards.
- Minimises concrete failure at joints.
- Quality joints that reduced damage to equipment.
- Joint integrity and reduces the need for frequent joint repairs or maintenance.



**Note:** Danley™ Keyjoint™ may not be suitable for use in pavements in highly corrosive environments including (but not limited to): Chlorinated or salt-water swimming pools, Coastal or Marine environments, Waste Water Treatment plants, Rural and/or farming applications exposed to high levels of nitrates (including fertilizer), Pavements exposed to Hydrochloric acid.





# **Product Specifications**

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#### **Keyjoint**

Part #	Description	Pack Qty	Weight KG's
KJ100X3M4STK	Key Joint 100mm x 3m with 4 x 350mm Stakes	20 & 50	160.0
KJ125X3M4STK	Key Joint 125mm x 3m with 4 x350mm Stakes	20 & 50	180.0
KJ150X3M4STK	Key Joint 150mm x 3m with 4 x 350mm Stakes	20 & 50	201.0
KJ200X3M4STK	Key Joint 200mm x 3m with 4 x 450mm Stakes	20 & 50	235.0
KJ250X3M4STK	Key Joint 250mm x 3m with 4 x 550mm Stakes	20 & 50	255.0



#### Keyjoint Expanda™

Part #	Description	Pack Qty	Weight KG's
KJEXP100X3M4STK	Key Joint Expanda 100mm x 3mtr with 4 x 350mm Stakes - Foam 5mm	10	35.0
KJEXP125X3M4STK	Key Joint Expanda 125mm x 3mtr with 4 x 350mm Stakes - Foam 5mm	10	44.0
KJEXP150X3M4STK	Key Joint Expanda 150mm x 3mtr with 4 x 350mm Stakes - Foam 5mm	10	52.5
KJEXP200X3M4STK	Key Joint Expanda 200mm x 3mtr with 4 x 450mm Stakes - Foam 5mm	5	35.0
KJEXP250X3M4STK	Key Joint Expanda 250mm x 3mtr with 4 x 550mm Stakes - Foam 5mm	5	43.8



#### **Keyjoint Capping**

Part #	Description	Pack Qty	Weight KG's
KJCSTD10X025BLA	Keyjoint Capping - 10mm Standard Removable (25mtr roll) C	1	35.0
KJCBLK12X025BLA	Keyjoint Capping - 12mm Block Removable (25mtr roll) B	1	44.0
KJCRIP13X025BLA	Keyjoint Capping - 13mm Rip A Strip (25mtr roll) - Black A	1	52.5
KJCRIP13X025GRE	Keyjoint Capping - 13mm Rip A Strip (25mtr roll) - Grey A	1	35.0



# **Keyjoint Capping**

Keyjoint Capping profiles are available in 2 styles: Removable Capping and Rip-A-Strip™ Permanent Capping.
Removable KeyJoint Capping profiles are available in 10mm wide profile providing a 3mm recess, and a 12mm wide profile, which provides a 10mm recess. Once removed, the capping provides a recess for cold-applied sealants.

Rip-A-Strip™ permanent capping is available in 2 colours: grey & black. Rip-A-Strip™ gives you efficient crack control with an attractive architectural finish.





# **Product Compliance**

## **Compliance statement**

Danley<sup>™</sup> Keyjoint & Keyjoint Expanda<sup>™</sup> complies with the New Zealand Building Code clauses identified below.

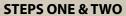
## **Compliance details: NZBC**

NZBC Clause	Criteria	Compliance Status
B1.3.1	'Buildings, building elements and sitework shall have a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during construction or alteration and throughout their lives.'	
B1.3.2	'Buildings, building elements and sitework shall have a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives, or during construction or alteration when the building is in use.'	
B1.3.3 (a), (b), (d), (e), (f), (g), (h), (j), (q)	'Account shall be taken of all physical conditions likely to affect the stability of buildings, building elements and sitework, including: (a) Self weight, (b) Imposed gravity loads arising from use (d) Earth pressure, (e) Water and other liquids, (f) Earthquake, (g) Snow, (h) Wind (j) Impact (q) Time dependent effects including creep and shrinkage.	
B1.3.4	'Due allowance shall be made for: (a) The consequences of failure, (b) The intended use of the building, (c) Effects of uncertainties resulting from construction activities, or the sequence in which construction activities occur, (d) Variation in the properties of materials and the characteristics of the site, and (e) Accuracy limitations inherent in the methods used to predict the stability of buildings.'	
B2.3.1 (a)	'Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the specified intended life of the building, if stated, or: (a) The life of the building, being not less than 50 years, if (i) Those building elements Provide structural stability to the building, or (ii) Those building elements are difficult to access or replace, or (iii) Failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building.'	
F2.3.1	'The quantities of gas, liquid, radiation or solid particles emitted by materials used in the construction of buildings, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.'	



# Installation





Preparation of the subgrade and the boxing for the adjacent slabs. Pre-cut length of Expanda Joint, using the height adjustable Keyjoint stakes to provide support. Follow the instructions on how to set up Dowelmaster® and Keyjoint, then you are ready to pour.



#### STEP THREE

Install Danley's Square Dowels (16mm) and Dowelmaster® using both the Dowelmaster® stakes and the Keyjoint stakes. Ensure both the dowels are horizontally aligned. Extra support may be required when Expanda Joint is used as a stop end.



#### **STEPS FOUR & FIVE**

Pour the concrete up to or past the Expanda Joint as required. Allow the concrete to cure and then proceed to strip the removable capping from the Expanda Joint to produce a clean and clearly defined joint finish.

#### **END RESULT**

As you can see pictured, Expanda Joint is the newest and simplest way to ensure your next footpath/driveway remains as the designer intended.



#### **Customer Service**

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None of the products listed in this document are subject to a warning or ban under the Building Act 2004.

