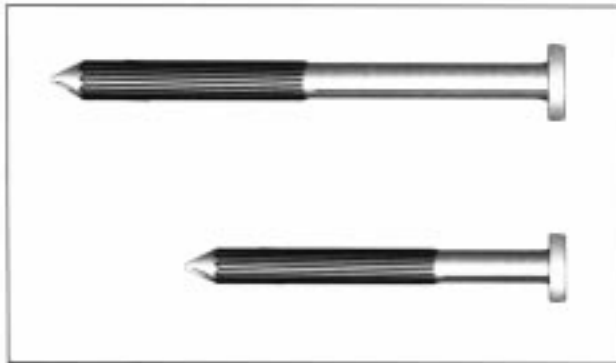


FLAT ROOFING



**KING-CON™**  
**Masonry Fastening System**

*Versatile nail-in anchor for secure attachment to structural concrete and masonry*

**APPLICATIONS**

- Insulation and membrane attachment to structural concrete decking.
- Roof flashings, gravel stops, expansion joints, gutters and downpipes.
- Timber battens, plywood backing boards, baseboards units.
- Duct straps, equipment supports, etc.

**PRODUCT INFORMATION**

- Versatile performance. Can be used in concrete, brickwork and most masonry materials.
- Unique spiral flutes cut into masonry for superior holding power.
- King-Con is not sensitive to increased depth of embedment, ensuring easy installation.
- Available in lengths 28mm - 152mm. PLUS longer lengths available to special order.
- Heat treated for extra strength - resists bending.
- FM - Factory Mutual Approved.

**PRODUCT SPECIFICATIONS**

<b>Spiral Flute Diameter</b>	6.3mm
<b>Head Style</b>	Low Profile Flat
<b>Point Type</b>	Nail
<b>Finish</b>	Black Spex
<b>Installation</b>	Drill 5.5mm pilot hole Install anchor using 3lb club hammer

**DRILL BITS AND PLATES**

- 5.5mm dia. SDS drill bits - for concrete applications.
- 80mm round plastic, 72mm square metal, and 80 x 40mm rectangular metal stress plates are available for roofing insulation and membrane attachment.

**CORROSION RESISTANCE**

**Kesternich Results (DIN 50018, 2.0L)**  
• 20 Cycles - 15% or less red rust

**Salt Spray Results (ASTM B117)**  
• 250 hours - 10% or less red rust

## KING-CON™ - MASONRY FASTENING SYSTEM

### SELECTOR GUIDE

Code No.	Length (mm)	Fixture Thickness (mm)	Suitable Drill Bit*	Drill Bit Code No.
KC28	28	up to 3	SDS 5.5 x 168mm	55SDS168
KC38	38	up to 6	SDS 5.5 x 168mm	55SDS168
KC51	51	up to 19	SDS 5.5 x 168mm	55SDS168
KC64	64	19 to 32	SDS 5.5 x 168mm	55SDS168
KC76	76	32 to 44	SDS 5.5 x 168mm	55SDS168
KC89	89	44 to 57	SDS 5.5 x 168mm	55SDS168
KC102	102	57 to 70	SDS 5.5 x 220mm	55SDS220
KC115	115	70 to 83	SDS 5.5 x 220mm	55SDS220
KC127	127	83 to 95	SDS 5.5 x 220mm	55SDS220
KC140	140	95 to 108	SDS 5.5 x 220mm	55SDS220
KC152	152	108 to 120	SDS 5.5 x 295mm	55SDS295

- Longer lengths are available - contact sales desk for details
- The recommended depth of embedment for King-Con is 32mm.
- The minimum embedment required is 25mm and the maximum recommended embedment is 45mm.

#### STRESS PLATES

Code No.	Description
RGP80	80mm round plastic with gearlock
FV8040	80 x 40mm rectangular galvanised metal
KC7272	72mm square galvalume metal - FM approved

\* SDS hammer bits are not suitable for drilling brickwork. Use standard 5.5mm diameter rotary percussion masonry drill bits.

### PERFORMANCE DATA

#### PULL-OUT IN CONCRETE

Depth of embedment in solid material	Depth of embedment in solid material			
	25mm	32mm	38mm	45mm
20 Newton	6.6	7.1	7.6	8.4
40 Newton	7.5	8.1	9.1	10.1

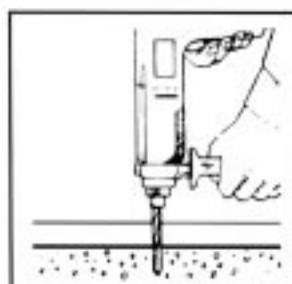
#### SHEAR STRENGTH

Depth of embedment in solid material	Depth of embedment in solid material			
	25mm	32mm	38mm	45mm
20 Newton	7.2	7.8	10.2	12.1
40 Newton	7.8	8.4	10.8	12.1
lightweight Hollow Block	4.8	5.2	5.9	6.7

#### PULL-OUT IN LIGHTWEIGHT HOLLOW BLOCK

Depth of embedment in solid material	Depth of embedment in solid material			
	25mm	32mm	38mm	45mm
	N/A	3.55	4.9	5.6

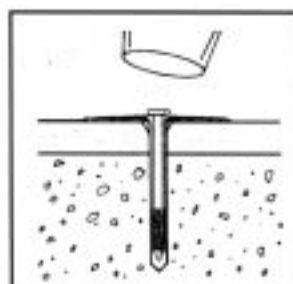
### INSTALLATION GUIDELINES



**STEP 1:**  
A pilot hole should be drilled into the concrete or masonry using the correct size masonry drill bit. The hole must be drilled a minimum of 20mm deeper than the required embedment of the King-Con.

Note: The recommended depth of embedment is 32mm. The minimum embedment required is 25mm and the maximum recommended embedment is 45mm.

**STEP 2:**  
A 3 lb club hammer should be used to drive the anchor into the base material.



King-Con™, Spax™ and Building Ideas That Work are registered trademarks of ITW Buildex and Illinois Tool Works Inc.

#### NOTE:

Note: Indicated pullout and shear values were obtained in tests witnessed by Professional Service Industries, Inc. personnel. Designated holding power depends on the quality of the masonry material, depth of embedment and proper hole size. These figures are offered only as a guide and are not guaranteed in any way by ITW. The figures indicate average ultimate pullout and shear failure values. A safety factor of 4:1 or 25% of ultimate pullout value is generally accepted as a safe working load. However, reference should always be made to applicable codes for the specific safe working ratio. As in the case with all applications, Buildex can only suggest typical fasteners for typical applications. The connection design is the sole responsibility of the building design engineer, architect or otherwise responsible person charged with the design of the connection. For further product information, please contact the Buildex Customer Service Department.

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