## The Worlds Most Accurate Screed Rail System

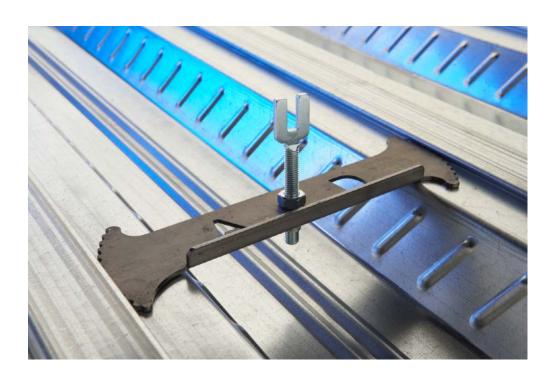
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Acra Screed is a Patented Product

# **Acradeck System**



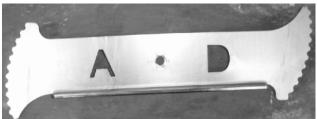
#### **Product Overview**

Acradeck is a steel component used to assist in the placement of concrete on Metal decking by helping to achieve the correct depth of concrete and assisting in the prevention of overloading the Metal decking during the concrete pour. Overloading of metal decking can and has caused serious injury during concrete placement and in certain cases the decking has collapsed due to the excess weight caused by overloading.

Acradeck was developed following requests from a member of the Concrete Society for Acra Screed, to develop a system which would help in the prevention of overloading. Further concerns were raised when a particular project was surveyed and the finished floor was found to be 60mm thicker than specified which further substantiated the requirement of a system to help in curing this problem.

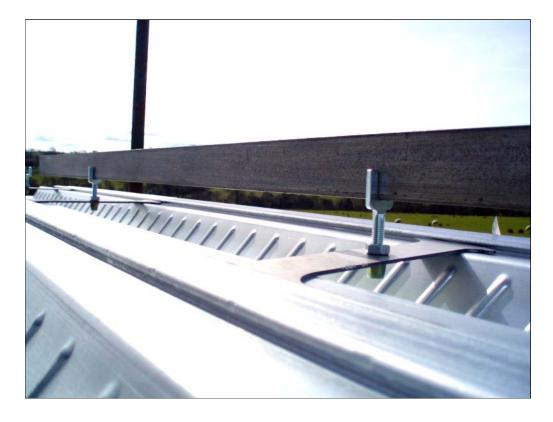
One unit is made up of four components.





Acradeck is available in numerous profiles to suit the many Metal decking profiles on the market. It is therefore not feasible to have a drawing for each profile shown here. Should a drawing be required we will be more than happy to provide one for your specific decking type.

In the centre of all Acradeck plates there is a nut cert to accommodate the Rail Support.



### Component 2 - 10mm Nut

A 10mm Nut is used to lock the Rail support in position. Prior to putting the rail support into the decking plate the 10mm nut is threaded well on to the Rail support stud. When final levels have been set the nut is tightened down to the top of the Acradeck plate.



#### **Rail Support Head Variations**



Single Rail Support - Welded to Stud



Double Rail Support - Welded to Stud



The New Rail Support heads - Single and Double are connected to a round stud connector. The benefits of this new system is that any length of 10mm Stud can now be connected into the Rail Support, which in turn gives the user greater flexibility and no unnecessary waste.

The New Rail Support heads are only suitable for slabs of 200mm in depth upwards.



Single Rail Support Head showing insert for stud.

10mm Stud shown to the right. Stock carried as standard for slabs up to 300mm. Pre order required for depths above 300mm.



The Rail Support examples given above accommodate 8mm x 40mm and 8mm x 50mm Rail. A further head is available to accommodate a 12mm x 30mm Rail when required. Please note that the 12mm Rail supports are made to order.

The Rail Support will give an adjustment range, in general of 50mm, 25mm either side of finished level. This can then be tweaked to within half a millimetre of the finished level.

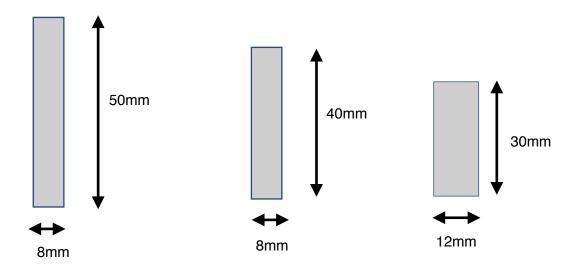
When using the Acradeck System the depth range generally stays within the 50mm range however certain Metal decking profiles allow for greater adjustment ranges when requested..

The Double rail support is used where two lengths of rail meet - the rail comes in standard lengths of 6 metres, therefore a Double rail Support is required every 6 metres.



**Rail Sizes** 

The Rail is placed into the rail support.



Rail variations given above. The Rail is reusable. Above photograph gives example of a rail been moved during concrete pour to new position into pre set Rail Supports.

Rail Supports for 8mm Rail carried as standard stock.

Rail Supports for 12mm Rail manufactured to order.

### **Installation Recommendations**

**Important:** Metal decking naturally deflects during concrete placement and for this reason the Acradeck system cannot give any assurances of level results.

Acra Screed recommends that one unit is positioned every meter along the screed rail line. To make the concrete pour comfortable for those laying the concrete Acra Screed recommends positioning the Screed Rail 400mm less than the power screed or hand tamp to be used.

For example a 4.2 meter Roller Striker - screed rail positioned every 3.8 meters apart, allowing 200mm overhang either side of the screed rail.

On the home page of the Acra Screed web site <a href="https://www.acrascreed.com">www.acrascreed.com</a> there are two videos, the videos relate to the Base Block system of Acra Screed, however the basic concept of setting up the rail supports and a concrete pour are virtually the same. The bottom video on the Acra Screed website homepage shows the Acra Screed system been set up, the top video shows a concrete pour. Watching this video is highly recommended for those new to the product.

The Acradeck system is twisted into position by inserting into the actual profile of the Metal decking itself and because of this Acradeck will follow any movement the Metal decking makes and therefore helps maintain a constant thickness and greatly assists in not overloading. The rail support of the Acradeck system provides adjustments to be made prior to the concrete pour which greatly helps in achieving a constant concrete thickness.







Acradeck is twisted into the Metal decking profile then gently taped with a hammer to give a secure fit but not so tight as to spread the decking.

## **Material Specifications**

Component	Material	Additional Information	By Request
Acradeck plate	2.5mm Mild Steel S275 (BS EN 10025 S275) Precision cut by Laser.	Acradeck is available to suit various profiles which include both Trapezoid and Dove tail type profiles. While the most popular metal decking profiles are carried in stock, a number of profiles do have to be made to order due to the large variety of profiles now available. Please contact Acra Screed for further information.	Profile Required
10mm Nut	M10 (10mm) internal thread		
Rail Supports	S275 BS EN 10025.S275 - Bright zinc plated or Self coloured.	Precision cut by Laser	Rail Support head type
Stud	Grade 4.8 Mild Steel metric fine (1.25mm)	Various lengths	Depth required
Rail	Black flat rail BSEN 10025-2:2004 S275JR	30mm x 12mm 40mm x 8mm 50mm x 8mm	

The information provided within this data sheet is approximate. Acra Screed Ltd reserves the right to amend this data sheet at any time. For further details, please contact Acra Screed Ltd Acra Screed Ltd is a registered in England & Wales - No 5582982