

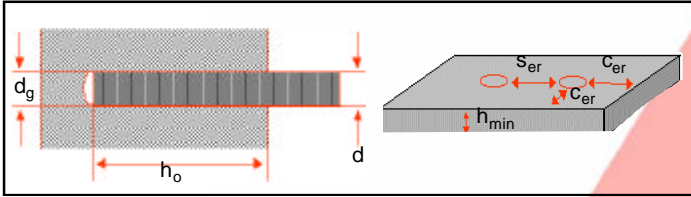


# Sika® AnchorFix-1

Fast Curing Anchoring Adhesive  
(Formerly Sika® PowerFix®-1)

## Load Capacity Data

### FOR ALL THREADED RODS



Thread Rod d	M8	M10	M12	M16	M20	M24
Hole diameter do(mm)	10	12	14	18	24	26
Hole depth ho(mm)	80	90	110	125	170	210
Required edge distance to achieve Nrec Cer (mm)	120	135	165	190	255	315
Required anchor spacing to achieve Nrec Ser (mm)	80	90	110	125	170	210
Min. thickness of concrete member hmin (mm)	110	120	140	165	220	270
Characteristic load in concrete C25/30 NRK(kN)	14.9	24.6	31.3	44.0	63.2	80.3
Recommended load in concrete C25/30 Nrec(kN)	5.0	8.2	10.4	14.7	21.6	26.8

**Important!** The load capacity of the threaded rod must be checked.

### FOR REINFORCING BAR ANCHORS

Requirements for the calculation of the characteristic load capacity:

- \* Reinforcing bar fy450 ribbed
- \* Min. concrete grade C25/30
- \* Anchor hole must be dry

Bar diameter d (mm)	6	8	10	12	14	16	20	25
Hole diameter do (mm)	8	10	12	14	18	20	25	32
Minimum anchor embedment hmin (mm)	60	80	90	110	125	145	170	210

Equation for tensile load capacity:  $N_{RK} = \frac{h_{ef} - 50}{2.5}$

Equation for shear load capacity:  $V_{RK} = \frac{h_{ef} * d_o * f_{cm} * 0.5}{1000}$

### Reduction factors for close edge distances and anchor spacing

Reduced anchor spacing Rf <sub>s</sub> tension and shear	Close edge distances Rf <sub>c</sub>	
	tension	shear
Area of validity Ø • 16 mm S <sub>min</sub> =0.50 h <sub>ef</sub> , S <sub>er</sub> =1 h <sub>ef</sub> Ø • 16 mm S <sub>min</sub> =0.50 h <sub>ef</sub> , S <sub>er</sub> =1 h <sub>ef</sub>	Area of validity C <sub>min</sub> =0.50 h <sub>ef</sub> , C <sub>er</sub> =1.5 h <sub>ef</sub>	Area of validity C <sub>min</sub> =0.50 h <sub>ef</sub> , C <sub>er</sub> =1.5 h <sub>ef</sub>
$Rf_B = 0.4 + \left[ 0.6 \times \frac{S}{h_{ef}} \right]$	$Rf_B = 0.4 + \left[ 0.6 \times \frac{S}{h_{ef}} \right]$	$Rf_{CV} = 0.25 + \left[ 0.5 \times \frac{C}{h_{ef}} \right]$

**Important!** The load capacity of the steel reinforcement bar must be checked.

- h<sub>ef</sub> = effective anchorage depth (mm)
- N<sub>RK</sub> = anchor characteristic load under tension (kN)
- V<sub>RK</sub> = anchor characteristic load under shear (kN)
- d<sub>o</sub> = hole diameter (mm)
- t<sub>cm</sub> = concrete compressive strength (N/mm<sup>2</sup>)
- S = distance between anchors (mm)
- C = distance of anchor from free edge (mm)



**Handling Precautions**

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

**Important Note**

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

**Please consult our Technical Sales Department for further information**

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