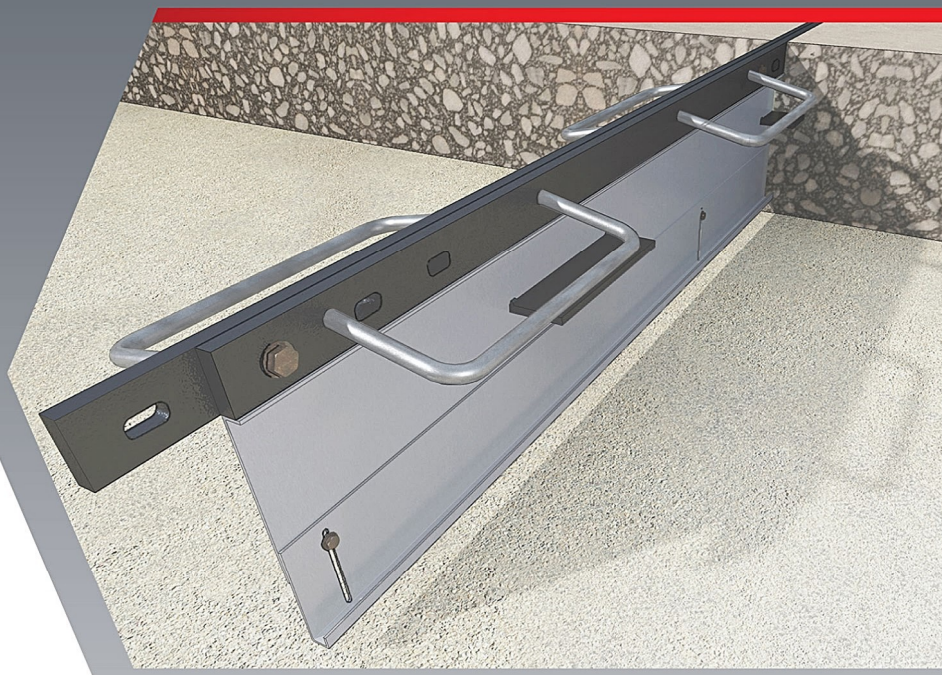
FlorCon
FLOOR INNOVATIONS

# ARMOUR
JOINT ADJUSTABLE

DESIGNED IN UK
PRODUCED IN RUSSIA

## ARMOUR
## JOINT ADJUSTABLE



### TRADITIONAL JOINT ARMOURING IN ADJUSTABLE HEIGHT FORMAT

## ADVANTAGES

- Adjustable height format for variable-depth slabs
- Standard Joint heights available: 150-200 mm, 200-250 mm
- Superior joint armouring with 10mm wide square corner cold drawn steel
- The best discrete plate dowel load transfer
- High load transfer from high tensile plate dowels
- Improved locking into concrete compared to shear studs
- Reduced random cracking potential
- Stress relief in concrete
- Increased bearing capacity
- Floor life increased


**FlorCon Rus**

FLOOR INNOVATIONS

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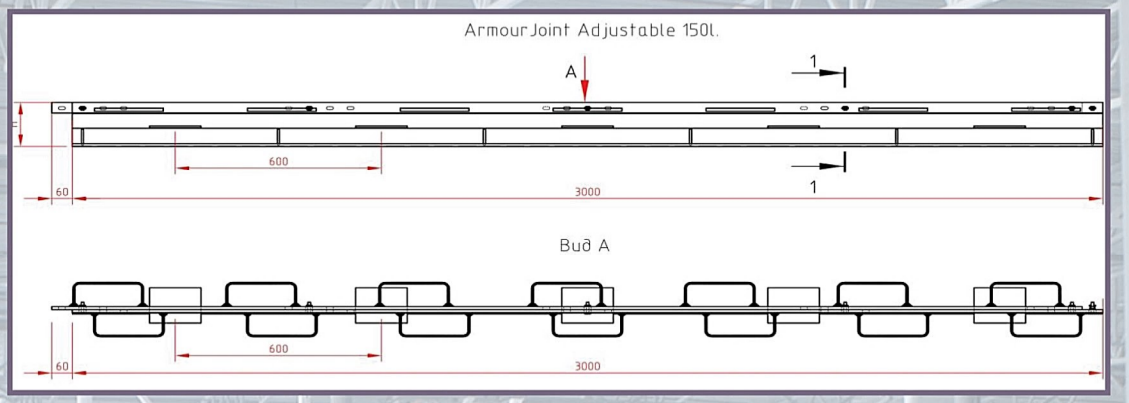
CONCRETE SOCIETY

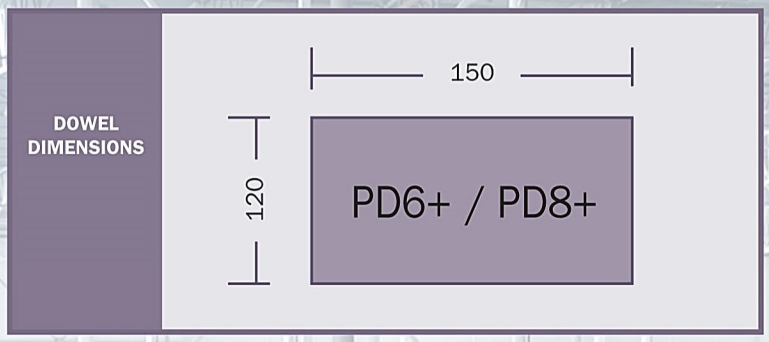
Technical Report 34
CONCRETE INDUSTRIAL GROUND FLOORS
A guide to design and construction

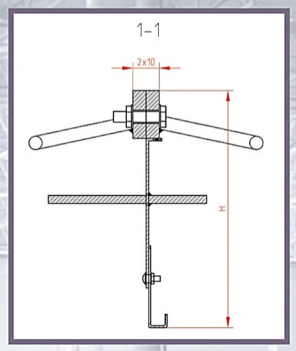
COMPLIANT WITH TR34

# STRUCTURE

# ARMOUR
## JOINT ADJUSTABLE




## Dowel bearing capacity and load transfer (in accordance with TR34 4-th edition)

| For typical concrete slabs, C25/30 concrete grade, joint opening up to 20mm (calculations for unreinforced slab); modulus of subgrade reaction $k_s$=0,03 H/mm³ | | Bursting, kN | | Bending, kN | | Max. calculated load transfer within the effective length 2x0.9x$L$* | |
|---|---|---|---|---|---|---|---|
| Slab depth | Dowel type | Dowel | Running meter | Dowel | Running meter | 2x0.9x$L$, m | kN |
| 150mm | PD6+ | 19,2 | 32,0 | 44,3 | 74,0 | 1,335 | 43 |
| | PD8+ | 19,2 | 32,0 | 69,8 | 116,3 | 1,335 | 43 |
| 200mm | PD6+ | 31,5 | 52,5 | 44,3 | 74,0 | 1,657 | 87 |
| | PD8+ | 31,5 | 52,5 | 69,8 | 116,3 | 1,657 | 87 |
| 250mm | PD6+ | 35,4 | 58,9 | 44,3 | 74,0 | 1,959 | 115 |
| | PD8+ | 35,4 | 58,9 | 69,8 | 116,3 | 1,959 | 115 |
| 300mm | PD6+ | 37,6 | 62,7 | 44,3 | 74,0 | 2,245 | 140 |
| | PD8+ | 37,6 | 62,7 | 69,8 | 116,3 | 2,245 | 140 |
| 350mm | PD6+ | 42,1 | 70,2 | 44,3 | 74,0 | 2,521 | 177 |
| | PD8+ | 42,1 | 70,2 | 69,8 | 116,3 | 2,521 | 177 |

* – effective length of the joint participating in load transfer across the joint is 2x0,9x$L$ (for the case of a single point load at the joint edge), where $L$ – radius of relative stiffness depends on slab depth, modulus of subgrade reaction $k_s$, concrete strength grade.

*This table shows the load at failure in bursting (failure of the concrete) and bending (failure of the dowel) for a joint opening of 20mm. Larger joint openings can be accommodated. The ultimate load has been calculated in accordance with TR34 4-th Edition. For more detailed analysis please contact FlorCon Rus.*