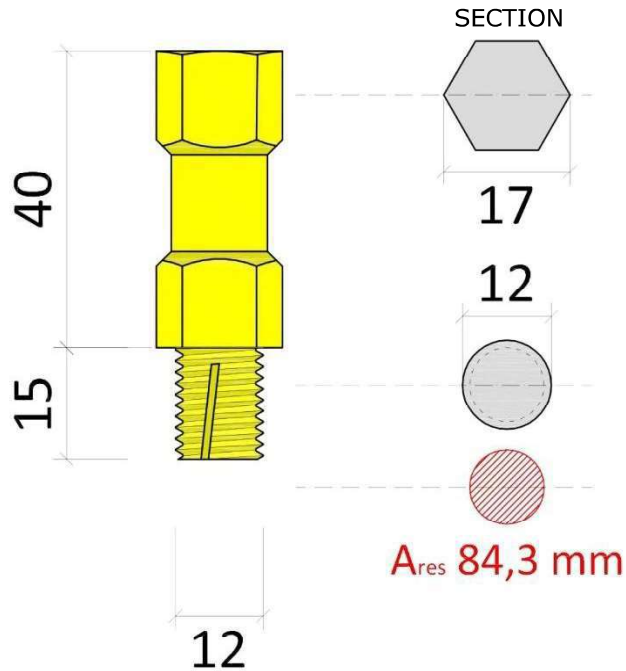


AL-FER S.R.L.

STEEL



ALFER CONNECTOR STEEL-CONCRETE STANDARD TECHNICAL SHEET

CONNECTOR

| | | |
|----------------------------------|------------------|-----------------------|
| Material of the connector | 9sMnPb36 | |
| Stud diameter | d | 16 mm |
| Thread UNI 5737 M12 x 1,5 x 15 | A _{res} | 84,3 mm ² |
| Characteristic breaking strength | f _{uk} | 800 N/mm ² |

SPECIFICATION ITEM

ALFER connector type AC1 consists of a single steel body composed in the lower part of UNI 5737 M12 x 1,5 x 20 self-tapping thread for mechanical connection to the steel profile, limit-stop and characteristic grooves specifically designed to connect to the concrete of the slab

MECHANICAL VALUES OF THE CONNECTION

NORMAL STRENGTH CONCRETE (NSC)

| | | | | |
|-----------------------------------|-----------------|-----------------------|-------------------|-----------------------|
| Concrete | R _{ck} | 30 N/mm ² | f _{ck} | 25 N/mm ² |
| Steel profile | f _w | 360 N/mm ² | f _v | 235 N/mm ² |
| Compress strength concrete | | | P _{rd,1} | 33957 N |
| Shear resistance of the connector | | | P _{rd,2} | 26819 N |

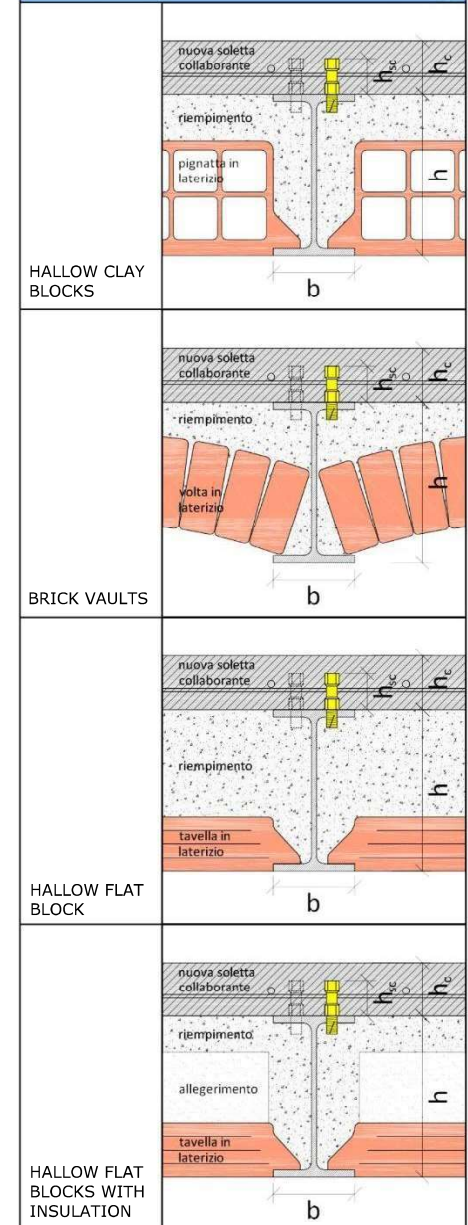
HIGH STRENGTH CONCRETE (HSC)

| | | | | |
|-----------------------------------|-----------------|-----------------------|-------------------|-----------------------|
| Concrete | R _{ck} | 35 N/mm ² | f _{ck} | 28 N/mm ² |
| Steel profile | f _w | 360 N/mm ² | f _v | 235 N/mm ² |
| Compress strength concrete | | | P _{rd,1} | 40706N |
| Shear resistance of the connector | | | P _{rd,2} | 26819 N |

LOW STRENGTH CONCRETE (LSC)

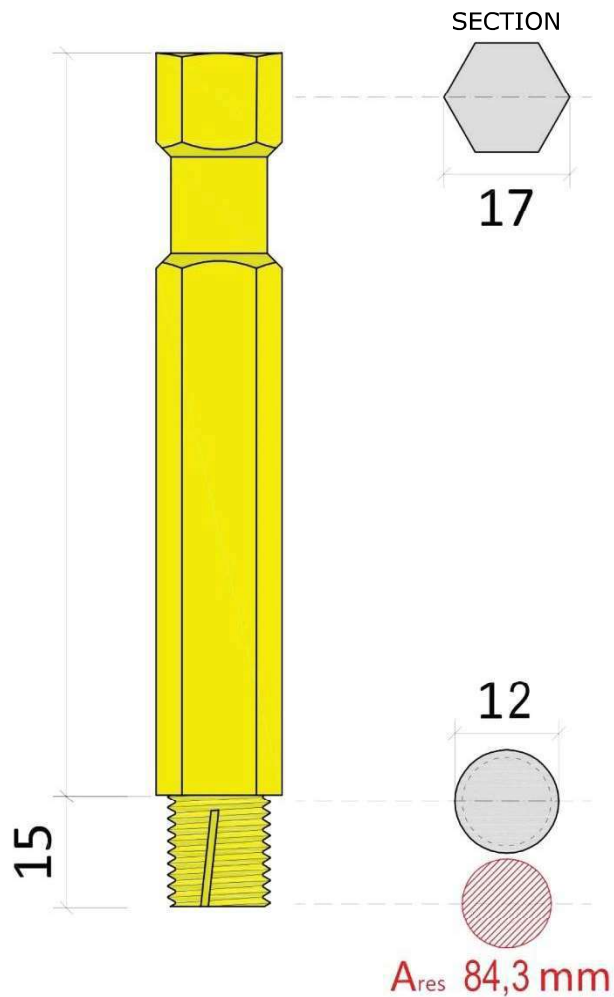
| | | | | |
|-----------------------------------|-----------------|-----------------------|-------------------|-----------------------|
| Concrete | R _{ck} | 25 N/mm ² | f _{ck} | 20 N/mm ² |
| Steel profile | f _w | 360 N/mm ² | f _v | 235 N/mm ² |
| Compress strength concrete | | | P _{rd,1} | 29663N |
| Shear resistance of the connector | | | P _{rd,2} | 26819 N |

SLAB SECTION





STEEL



ALFER CONNECTOR STEEL-CONCRETE

SPECIAL TECHNICAL SHEET

CONNECTOR

| | | |
|----------------------------------|------------------|-----------------------|
| Material of the connector | 9sMnPb36 | |
| Stud diameter | d | 16 mm |
| Thread UNI 5737 M12 x 1,5 x 15 | A _{res} | 84,3 mm ² |
| Characteristic breaking strength | f _{uk} | 800 N/mm ² |

SPECIFICATION ITEM

ALFER connector type AC1 consists of a single steel body composed in the lower part of UNI 5737 M12 x 1.5 x 20 self-tapping thread for mechanical connection to the steel profile, limit-stop and characteristic grooves specifically designed to connect to the concrete of the slab

MECHANICAL VALUES OF THE CONNECTION

NORMAL STRENGTH CONCRETE (NSC)

| | | | | |
|-----------------------------------|-----------------|-----------------------|------------------|-----------------------|
| Concrete | R _{ck} | 30 N/mm ² | f _{ck} | 25 N/mm ² |
| Steel profile | f _t | 360 N/mm ² | f _y | 235 N/mm ² |
| Compress strength concrete | | | P _{Rd1} | 46305 N |
| Shear resistance of the connector | | | P _{Rd2} | 36800 N |

HIGH STRENGTH CONCRETE (HSC)

| | | | | |
|-----------------------------------|-----------------|-----------------------|------------------|----------------------|
| Concrete | R _{ck} | 35 N/mm ² | f _{ck} | 28 N/mm ² |
| Steel profile | f _t | 360 N/mm ² | f _y | 235 N/mm |
| Compress strength concrete | | | P _{Rd1} | 55509 N |
| Shear resistance of the connector | | | P _{Rd2} | 36800 N |

LOW STRENGTH CONCRETE (LSC)

| | | | | |
|-----------------------------------|-----------------|-----------------------|------------------|----------|
| Concrete | R _{ck} | 25 N/mm ² | f _{ck} | 20 N/mm |
| Steel profile | f _t | 360 N/mm ² | f _y | 235 N/mm |
| Compress strength concrete | | | P _{Rd1} | 40408 N |
| Shear resistance of the connector | | | P _{Rd2} | 36800 N |

SLAB SECTION

