

Specifier's comments:

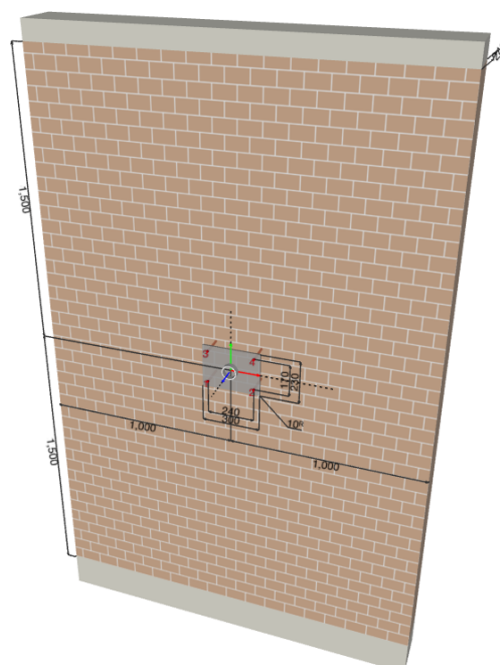
1 Input data



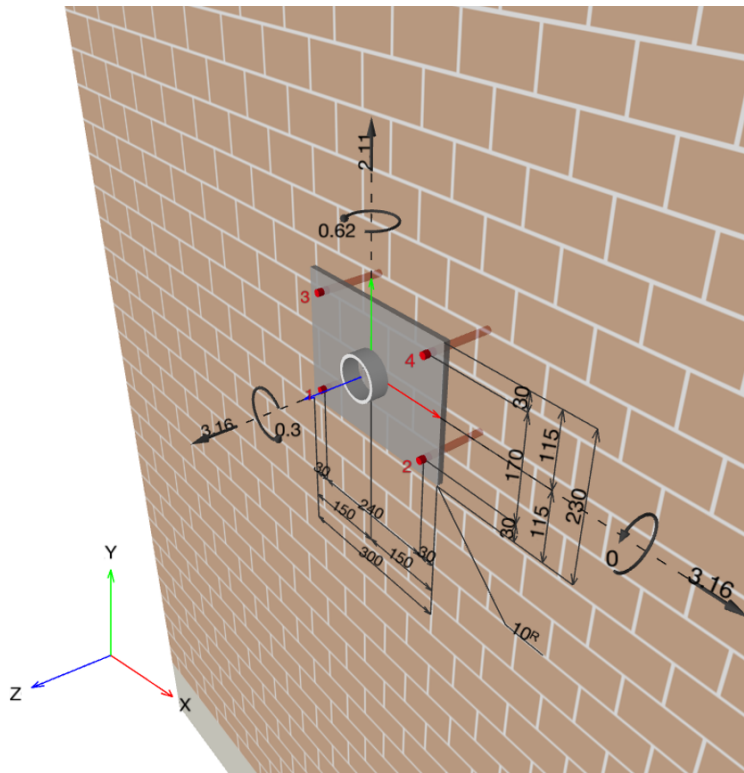
| | |
|------------------------------|---|
| Anchor type and size: | HIT-HY 270 + HAS-U 5.8 HDG M12 |
| Item number: | 2223939 HAS-U 5.8 HDG M12x160 (insert) / 2095982 HIT-HY 270 (mortar) |
| Effective embedment depth: | $h_{ef,opti} = 100.0 \text{ mm}$ ($h_{ef,limit} = 210.0 \text{ mm}$) |
| Material: | 5.8 |
| Approval No.: | ETA-19/0160 |
| Issued Valid: | 30/8/2019 - |
| Proof: | Design Method ETAG 029, Annex C |
| Stand-off installation: | $e_b = 0.0 \text{ mm}$ (no stand-off); $t = 10.0 \text{ mm}$ |
| Baseplate ^R : | $l_x \times l_y \times t = 300.0 \text{ mm} \times 230.0 \text{ mm} \times 10.0 \text{ mm}$; (Recommended plate thickness: not calculated) |
| Profile: | Pipe, 76,1 x 5,6; (L x W x T) = 76.1 mm x 76.1 mm x 5.6 mm |
| Base material: | Brick layout: Header; Brick: Mz, NF, f=10 (solid brick), Clay, L x W x H: 240.0 mm x 115.0 mm x 72.0 mm; $f_{b,v} = 10.00 \text{ N/mm}^2$; $E_{wall} = 2,756.53 \text{ N/mm}^2$ Mortar: M2,5 - M9; Vertical joints filled: YES; vertical: 5.0 mm; horizontal: 5.0 mm |
| Installation/Use: | Installation condition: Dry; Use condition: Dry; Cleaning: compressed air Temp. short/long: 40/24 °C |

^R - The anchor calculation is based on a rigid baseplate assumption.

Geometry [mm]



Geometry [mm] & Loading [kN, kNm]



1.1 Load combination

| Case | Description | Forces [kN] / Moments [kNm] | Seismic | Fire | Max. Util. Anchor [%] |
|------|-------------------------|---|---------|------|-----------------------|
| 1 | Load case: Design loads | N = 3.160; V _x = 3.160; V _y = 2.110; M _x = 0.000; M _y = 0.620; M _z = 0.300; | no | no | 139 |

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| Address: | | Specifier: | |
| Phone Fax: | | E-Mail: | |
| Design: | Masonry - 7 Feb 2022 | Date: | 7/2/2022 |
| Fastening Point: | | | |

2 Proof I Utilisation (Governing Cases)

| Loading | Proof | Design values [kN] | | Utilization | |
|---------|---------------------|--------------------|----------|-------------------------|-----------------|
| | | Load | Capacity | β_N / β_V [%] | Status |
| Tension | Brick breakout | 4.150 | 3.600 | 116 / - | not recommended |
| Shear | Local brick failure | - | - | - / 52 | OK |

| Loading | β_N | β_V | α | Utilization $\beta_{N,V}$ [%] | Status |
|----------------------------------|-----------|-----------|----------|-------------------------------|-----------------|
| Combined tension and shear loads | 1.153 | 0.511 | 1.000 | 139 | not recommended |

3 Warnings

- Please consider all details and hints/warnings given in the detailed report!

Fastening does not meet the design criteria!



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|------------------|----------------------|------------|----------|
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4 Remarks; Your Cooperation Duties

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