



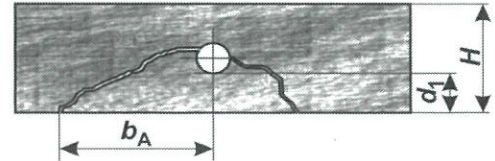
Standard: SN EN 13364, SN EN 1469

BREAKING LOAD AT DOWEL HOLE

Client: Bettazza Graniti SA
Project: Natural stone testing - Tricolore
Product: Slabs of natural stone for cladding
Quarry: Boschetto, Cevio (TI), Svizzera

Name of the stone: Tricolore
EN 12440 denomination: --
Petrographic description: Banded gneiss

Sampling: Carried out by the client
Delivery: 28.09.2020
Date of testing: 05.10.2020
Nominal sizes: L = 200 mm; W = 200 mm; H = 30 mm
Load direction: Parallel to the anisotropy planes
Fixing: Mortar with CEM I 52.5 R and w/c = 0.6
Hole dimensions: Diameter = 10 mm / Depth = 30 mm
Dowel: Stainless steel type 1.4571 / Ø = 6 mm
Load rate: 50 N/s
Technician: Geol. M. Asiani



Id.	Heigh H [mm]	Measured values		
		Distance d_1 [mm]	Distance b_A [mm]	Breaking load F [kN]
1	29.4	10.0	56	1.87
2	29.7	9.5	44	1.64
3	30.0	10.2	60	1.61
4	29.8	9.5	47	1.98
5	29.7	9.7	58	3.09
6	29.6	9.8	46	1.75
7	30.0	9.9	51	2.01
8	29.9	9.2	48	1.88
9	29.7	10.1	55	1.92
10	29.8	9.7	49	2.00
Mean and STD:		9.8 ± 0.3 mm	51 ± 6 mm	1.98 ± 0.42 kN
Lower expected value:		--	--	1.33 kN

Notes:

Grancia, 05.10.2020 General Manager: Dott. M. Di Tommaso

IMM sector: tests on natural stones

(Internal method: PN-11)

The results refer to the samples analyzed. Only the original paper version, signed and stamped, is legally valid. Even partial reproduction and unauthorized use for advertising purposes is prohibited.



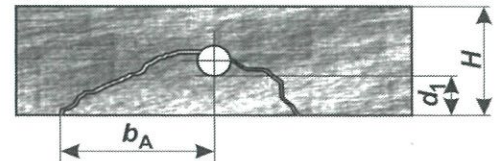
Standard: SN EN 13364, SN EN 1469

BREAKING LOAD AT DOWEL HOLE

Client: Bettazza Graniti SA
Project: Natural stone testing - Rovana
Product: Slabs of natural stone for cladding
Quarry: Boschetto, Cevio (TI), Svizzera

Name of the stone: Rovana
EN 12440 denomination: --
Petrographic description: Banded gneiss

Sampling: Carried out by the client
Delivery: 28.09.2020
Date of testing: 05.10.2020
Nominal sizes: L = 200 mm; W = 200 mm; H = 30 mm
Load direction: Perpendicular to the anisotropy planes
Fixing: Mortar with CEM I 52.5 R and w/c = 0.6
Hole dimensions: Diameter = 10 mm / Depth = 30 mm
Dowel: Stainless steel type 1.4571 / Ø = 6 mm
Load rate: 50 N/s
Technician: Geol. M. Asiani



Id.	Heigh H [mm]	Measured values		
		Distance d_1 [mm]	Distance b_A [mm]	Breaking load F [kN]
1	29.9	8.8	35	2.88
2	30.6	10.3	43	3.75
3	29.4	9.6	29	2.55
4	30.6	8.6	40	3.17
5	29.9	9.5	33	2.93
6	29.8	9.7	38	3.47
7	30.1	9.1	44	3.17
8	29.9	10.1	47	2.42
9	30.4	9.8	40	3.57
10	30.2	9.2	34	3.61
Mean and STD:		9.5 ± 0.5 mm	38 ± 5 mm	3.15 ± 0.46 kN
Lower expected value:		--	--	2.28 kN

Notes:

Grancia, 05.10.2020 General Manager: Dott. M. Di Tommaso

IMM sector: tests on natural stones

(Internal method: PN-11)

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