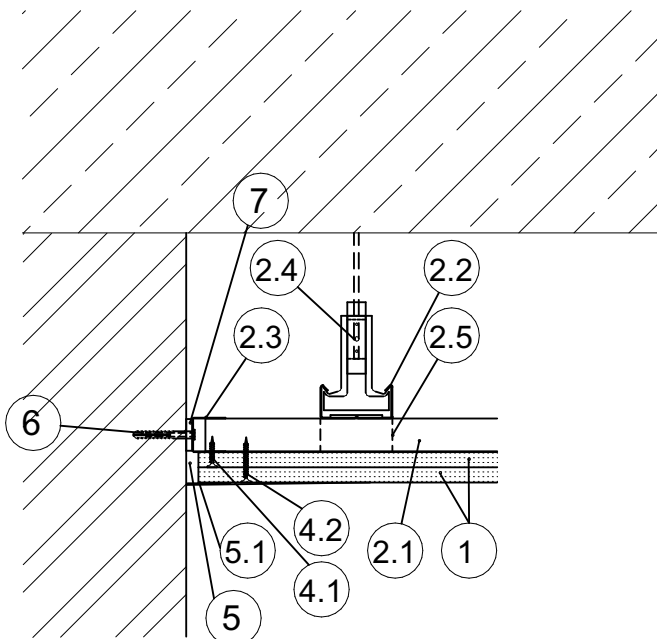


DETAIL A - EXTERNAL WALL/CEILING

SC 1:5

WA1 COMPOSITION OF EXTERNAL WALL HELUZ 50 2in1

N	FUNCTION	MATERIAL SPECIFICATION	STABILIZATION	THICKNESS
1	SURFACE FINISH	THIN-FILM PASTE PLASTER silicate, water vapour permeability $s_d < 0.14$ m, water absorbtion $w > 0.1$ and $< 0.5$ kg/m <sup>2</sup> *h <sup>0.5</sup> , cohesion 0.32 MPa, grain 1.5, 2.0, 3.0 mm, coefficient of thermal conductivity $\lambda_{10,dry}$ max 0.74W/m*K, fire reaction class A2- s1,d0	stainless steel trowel	2
2	PENETRATION	HIGH SHEAR PENETRATION UNDER SILICATE MATERIALS pH circa 11, solubility in water unlimited, drying time circa 12 hours CEMENT MORTAR FOR BASE LAYER TREATMENT + GLASS FIBRE MESH	roller, brush or spraying machine	-
3	CEMENT SPRAYING	compressive strength 6.0 MPa, adhesion min. 0.3 MPa, factor of diffusion resistance of water vapour max 35, coefficient of thermal conductivity $\lambda$ max 0.82W/m*K, fire reaction class A1, grain 0-2 mm	stainless steel trowel or spraying machine	8
4	LOAD-BEARING/ INSULATION	LOAD-BEARING MASONRY BRICK WITH IMPLEMENTED INSULATION monolayer perimeter brick of zero, passive, low energy and energy-efficient buildings, heat transfer coefficient U 0.11W/m <sup>2</sup> *K, thermal resistance R 9.16 m <sup>2</sup> *K/W, coefficient of thermal conductivity $\lambda_a$ 0.058W/m*K, fire reaction class B-s1,d0, fire resistance REI 30 DP1/90 DP3, airborne noise Rw 44(-1,-2), diffusion resistance factor $\mu$ 9.71	-	500
5	PENETRATION	CONCETRATED WATERDISPERSION concentrated aqueous dispersions of artificial resins based on acrylic resins with additives, consumption 100g/m <sup>2</sup> , dilution ratio 1:4, drying time circa 24 hours	roller, brush or spraying machine	-
6	ADHESIVE BINDER	GYPSUM ADHESIVE BINDER adhesion min. 0.24 MPa, fire reaction class A1, drying time min. 12 hours	stainless steel trowel	20
7	GYPSUM BOARD	GYPSUM BOARD coefficient of thermal conductivity $\lambda_a$ 0.21W/m*K, fire reaction class A2-s1,d0, diffusion resistance factor $\mu$ 6-10, longitudinal expansion factor in case of humidity change 5-8*10 <sup>-6</sup> , compressive strength 5.0 - 10.0 MPa	mechanically anchored	12.5
8	FILLER	UNIVERSAL PASTE FILLER bending strength > 320N, fire reaction class A2-s1,d0	stainless steel trowel	-
9	PAINT	ONE-COMPONENT, WATER-SOLUBLE PAINT DESIHNNED FOR GYPSUM BOARDS internal dispersion paint with organic binders and limestone fillers, water vapour permeability 0.02 m	brush or spraying machine	-



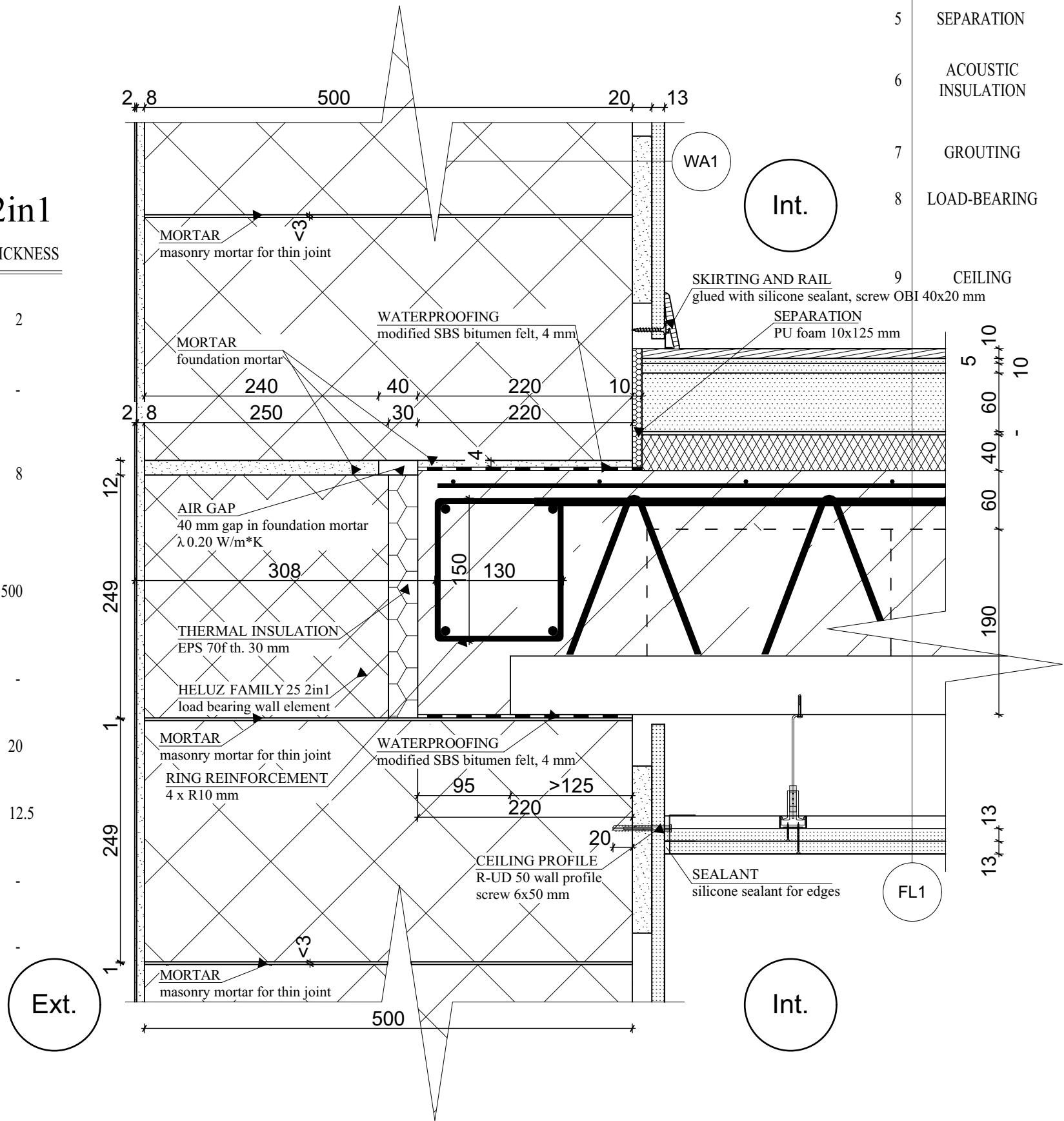
NO.	FUNCTION
1	PLASTERBOARD
2.1	MOUNTING R-CD PROFILE
2.2	LOAD-BEARING R-CD PROFILE
2.3	PERIMETER PROFILE UD
2.4	HANGER
2.5	ANGLED ANCHOR
4.1	SCREW 212/25 TN
4.2	SCREW 212/45 TN
5	ANCHORED TO PERIMETER STRUCTURE
5.1	REINFORCING TAPE

INSTALLATION

- 1) INSTALATION OF R-CD PROFILES
- 2) APPLICATION OF THE MINERAL WOOL, WHICH WILL BE INSERT ABOVE THE R-CD PROFILE
- 3) IT IS NECESSARY TO PUT THE INSTALATION OARDS ONE NEXT TO EACH OTHER, THERE CAN NOT E ANY GAP ETWEEN THEM
- 4) APPLICATION OF PLASTEROARDS AS DROPPED CEILING, IT WILL BE ANCHORED ON THE R-CD PROFILE

FL1 COMPOSITION OF FLOOR IN 2<sup>nd</sup> ABOVE GROUND FLOOR

N	FUNCTION	MATERIAL SPECIFICATION	STABILIZATION	THICKNESS
1	SURFACE FINISH	LAMINATE FLOORING marmoleum 2 mm on top finish, load-bearing 7 mm, bottom 1 mm	lock connected	10
2	SEPARATION	PE FOAM LAYER mirelon layer	-	5
3	LEVELING	SELF-LEVELING SCREED calcium sulfate base, thickness from 2.5 to 10 mm, compressive strength >35 N/mm <sup>2</sup> , coefficient of thermal conductivity $\lambda$ 1.4 W/m*K, density 2100 kg/m <sup>3</sup> initial setting 15-30 minutes, final setting 60-90 minutes, curing 48 hours	smoothing trowel or screeding rake	10
4	GROUTING	GROUTING CONCRETE SCREED concrete C20/25 XC1, consistancy S3, with reinforcement mesh diameter 4/150	-	60
5	SEPARATION	PLASTIC FOIL strong building foil	-	-
6	ACOUSTIC INSULATION	STEP INSULATION elasticized polystyrene, thermal resistance R 0.40 m <sup>2</sup> *K/W, coefficient of thermal conductivity $\lambda_a$ 0.037W/m*K, fire reaction class E, compressive strength 6.0 MPa	-	40
7	GROUTING	GROUTING CONCRETE concrete C20/25 XC1, consistancy S3, with reinforcement mesh diameter 4/150	-	60
8	LOAD-BEARING	CEILING JOIST + CARTRIDGE reinforced concrete, fire reaction class A1, fire resistance REI 180 D1	-	190
9	CEILING	GYPSUM BOARD + INSTALLATION GAP suspended ceiling, coefficient of thermal conductivity $\lambda_a$ 0.21W/m*K, fire reaction class A2-s1,d0, diffusion resistance factor $\mu$ 6-10, longitudinal expansion factor in case of humidity change 5-8*10 <sup>-6</sup> , compressive strength 5.0 - 10.0 MPa	-	2x12.5



NOTES:

- WALL LOAD-BEARING ELEMENTS AND CEILING JOISTS ARE PROVIDED BY COMPANY HELUZ
- MINIMAL DISTANCE FROM EDGE OF THE WALL TO END OF THE CEILING JOIST IS 125mm
- CEILING JOIST IS PLACED ON MODIFIED SBS BITUMEN FELT AS REQUIRED BY MANUFACTURER
- GROUTING CONCRETE C 20/25
- DETAILS OF REINFORCEMENT BARS CAN BE FOUND IN SEPARATEDRAWING
- MORTAR USED FOR CONNECTION OF BRICKS IS SBC MORTAR FOR THIN JOINTS
- RING CONCRETE C 20/25, REINFORCEMENT B500B SPECIFIED BY STATIC CALCULATIONS

0.000 = 162.00 m.a.s.l., B.H.S. / COORDINATE SYSTEM S-JTSK

TYPE OF WORK	DIPLOMA THESIS		<div><div>T</div><div>FAKULTA STAVEBNÍ ústav pozemního stavitelství</div></div>		
DRAWN BY	Bc. Richard Sasko				
SUPERVISED BY	Ing. Karel Struhala				
CUSTOMER	John Davidson, Suvorovova 2888/9, 902 01 Pezinok-Stará hora				
SITE LOCATION	Suvorovova 2888/9, 902 01 Pezinok-Stará hora				
PROJECT TITLE	HOTEL				
BUILDING OBJECT	H-1 HOTEL	PAPER FORMAT			4 * A4
PART	D.1.2 - Building Construction Solution	DATE			01/2019
DRAWING TITLE:		PHASE			DPS
	DETAIL A - EXTERNAL WALL/CEILING	SCALE 1:5	DRAWING NO. D.1.2.04		