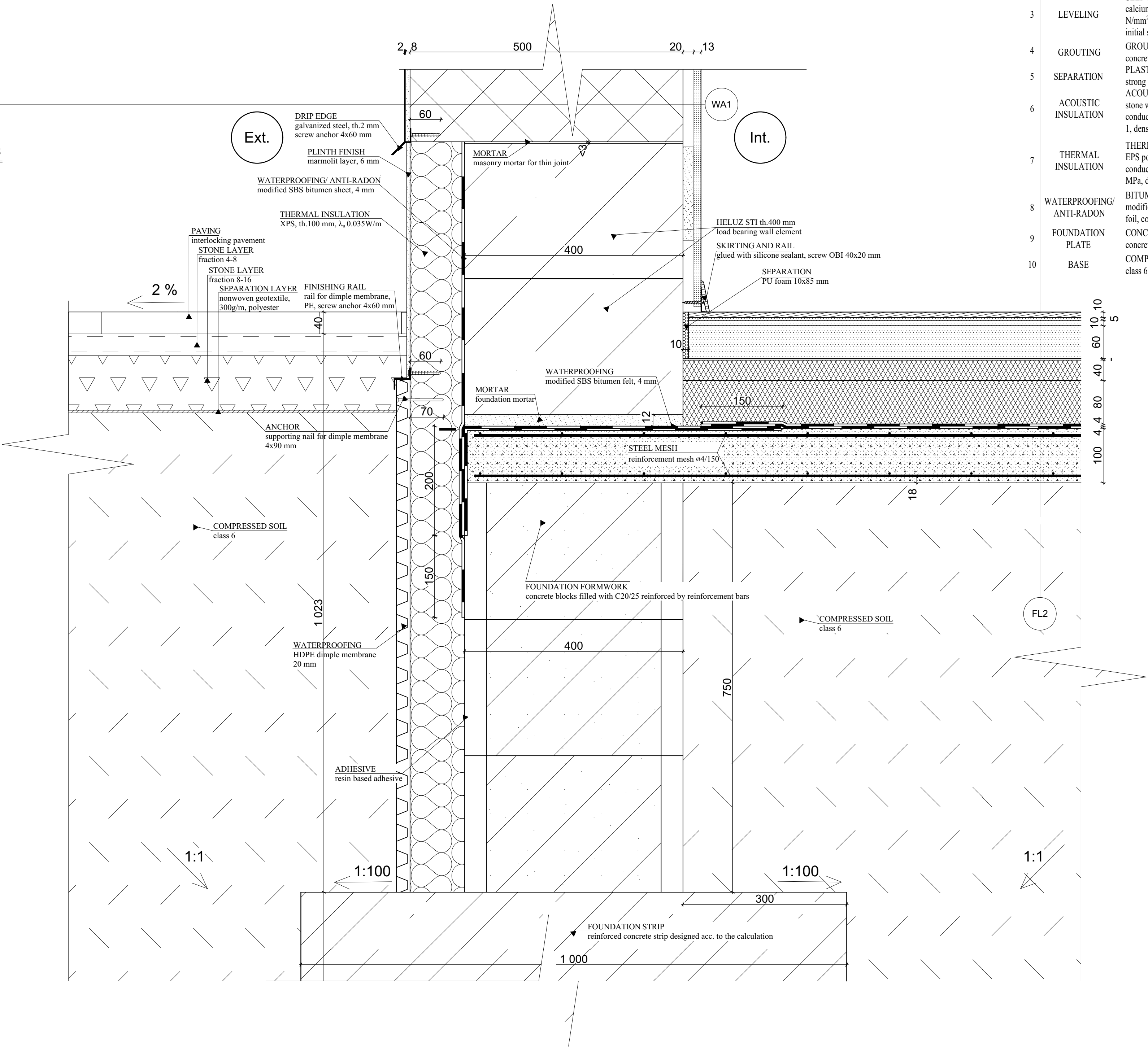


WA1 COMPOSITION OF EXTERNAL WALL HELUZ 50 2in1

N	FUNCTION	MATERIAL SPECIFICATION	STABILIZATION	THICKNESS
1	SURFACE FINISH	THIN-FILM PASTE PLASTER silicate, water vapour permeability $s_v < 0.14$ m, water absorbtion $w > 0.1$ and < 0.5 kg/m ² h ^{0.5} , cohesion 0.32 MPa, grain 1.5, 2.0, 3.0 mm, coefficient of thermal conductivity $\lambda_{0.060}$ 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 λ 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 ² *K, thermal resistance R 9.16 m ² *K/W, coefficient of thermal conductivity λ_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 μ 9.71	-	500
5	PENETRATION	CONCENTRATED WATER DISPERSION concentrated aqueous dispersions of artificial resins based on acrylic resins with additives, consumption 100g/m ² , 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 λ_a 0.21W/m*K, fire reaction class A2-s1,d0, diffusion resistance factor μ 6-10, longitudinal expansion factor in case of humidity change 5-8*10 ⁻⁶ , 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 DESIGNED FOR GYPSUM BOARDS internal dispersion paint with organic binders and limestone fillers, water vapour permeability 0.02 m	brush or spraying machine	-



FL2 COMPOSITION OF FLOOR IN 1st 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 ² , coefficient of thermal conductivity λ 1.4 W/m*K, density 2100 kg/m ³ 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, consistency S3, with reinforcement mesh diameter 4/150	-	60
5	SEPARATION	PLASTIC FOIL strong building foil	-	-
6	ACOUSTIC INSULATION	ACOUSTIC INSULATION stone wool, thermal resistance R 1.10 m ² *K/W, coefficient of thermal conductivity λ_a 0.035W/m*K, fire reaction class A1, diffusion resistance factor μ 1, density 40 kg/m ³	-	40
7	THERMAL INSULATION	THERMAL INSULATION EPS polystyrene, thermal resistance R 5.80 m ² *K/W, coefficient of thermal conductivity λ_a 0.034W/m*K, fire reaction class E, compressive strength 250 MPa, diffusion resistance factor μ 100	-	80
8	WATERPROOFING/ ANTI-RADON	BITUMEN SHEETS modified SBS, top layer separation spill, core layer glass textile, bottom layer PE foil, coefficient of thermal conductivity λ_a 0.21W/m*K	melted	2x4
9	FOUNDATION PLATE	CONCRETE PLATE + KARI WIRE MESH concrete C20/25 XC1, consistency S3, with reinforcement mesh diameter 4/150	-	100
10	BASE	COMPRESSED SOIL class 6, Rdt 500 kPa	-	200

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	8 * A4
PART	D.1.2 - Building Construction Solution		DATE	01/2019
DRAWING TITLE:			PHASE	DPS
	DETAIL B - FOUNDATIONS		SCALE	1: 5
			DRAWING NO.	D.1.2.05