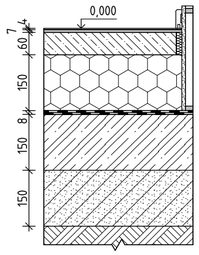
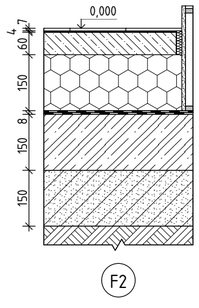
VÝUKOVÁ VERZE ARCHICADU
GRAPHISOFT.



F1

FLOOR ON GROUND
U = 0,230 W/m²K

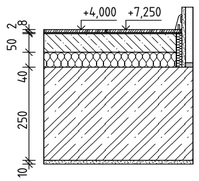
FLOORING » MARMOLEUM FORBO VIVACE	3 mm
ADHESIVE » FORBO EUROSAFE LINO PLUS (0,4 kg/m²)	1 mm
LEVELING BOARDS » FORBO QUICKFIT PANELS	7 mm
DISTRIBUTION LAYER » CONCRETE C20/25 » REINFORCEMENT BAR MESH (KARI) 150x150 mm » ON PE FOIL SEPARATION LAYER	60 mm
THERMAL INSULATION » EPS 150 S » λ_U = 0,038 W/mK » ρ = 25 kg/m³	150 mm
TOP WATERPROOF LAYER » GLASTEK 40 SPECIAL MINERAL » FULLY WELDED TO THE BOTTOM LAYER	4 mm
BOTTOM WATERPROOF LAYER » GLASTEK 40 SPECIAL MINERAL » FULLY WELDED TO THE FOUNDATION SLAB » ON PENETRATION PAINT DEKPRIMER (0,3-0,4 kg/m2)	4 mm
BASE SLAB » CONCRETE C30/37 XC2, B500B » REINFORCEMENT BAR MESH (KARI) 150x150 mm	150 mm
COMPACTED GRAVEL » FRACTION 16-32 mm	150 mm
SUBSOIL	---



F2

FLOOR ON GROUND
U = 0,238 W/m²K

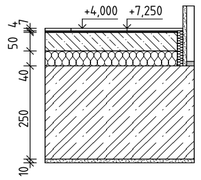
FLOORING » CERAMIC TILES » RAKO VANITY (ACCORDING TO ARCHITECTONICAL STUDY)	7 mm
ADHESIVE » SCHÖNOX SEK	3 mm
WATERPROOF LAYER » ELASTIC WATERPROOFING SCREED SCHÖNOX HA » ON PENETRATION PAINT SCHÖNOX KH (1:3)	1 mm
DISTRIBUTION LAYER » CONCRETE C20/25 » REINFORCEMENT BAR MESH (KARI) 150x150 mm » ON PE FOIL SEPARATION LAYER	60 mm
THERMAL INSULATION » EPS 150 S » λ_U = 0,038 W/mK » ρ = 25 kg/m³	150 mm
TOP WATERPROOF LAYER » GLASTEK 40 SPECIAL MINERAL » FULLY WELDED TO THE BOTTOM LAYER	4 mm
BOTTOM WATERPROOF LAYER » GLASTEK 40 SPECIAL MINERAL » FULLY WELDED TO THE FOUNDATION SLAB » ON PENETRATION PAINT DEKPRIMER (0,3-0,4 kg/m2)	4 mm
BASE SLAB » CONCRETE C30/37 XC2, B500B » REINFORCEMENT BAR MESH (KARI) 150x150 mm	150 mm
COMPACTED GRAVEL » FRACTION 16-32 mm	150 mm
SUBSOIL	---



F3

FLOOR
$L'_{n,w}$ = 35 dB (k_2 = 2 dB)

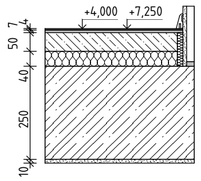
FLOORING » LAMINATE FLOORING » QUICK-STEP (ACCORDING TO ARCHITECTONICAL STUDY)	8 mm
DAMPENING LAYER » QUICK-STEP UNISOUND PRO » INTEGRATED VAPOUR BARRIER (s_d = 150 m)	2 mm
DISTRIBUTION LAYER » CEMENT SCREED CEMFLOW » ON PE FOIL SEPARATION LAYER	50 mm
ACOUSTIC INSULATION » MINERAL WOOL ISOVER T-N » λ_U = 0,039 W/mK » ρ = 75 kg/m³ » $\Delta L_{n,w}$ = 26 dB	40 mm
FLOOR STRUCTURE » REINFORCED CONCRETE SLAB C35/45 XC1, B500B	250 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



F4

FLOOR
$L'_{n,w}$ = 36 dB (k_2 = 2 dB)

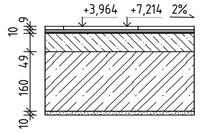
FLOORING » CERAMIC TILES » RAKO VANITY (ACCORDING TO ARCHITECTONICAL STUDY)	7 mm
ADHESIVE » SCHÖNOX SEK	3 mm
WATERPROOF LAYER » ELASTIC WATERPROOFING SCREED SCHÖNOX HA » ON PENETRATION PAINT SCHÖNOX KH (1:3)	1 mm
DISTRIBUTION LAYER » CEMENT SCREED CEMFLOW » ON PE FOIL SEPARATION LAYER	50 mm
ACOUSTIC INSULATION » MINERAL WOOL ISOVER T-N » λ_U = 0,039 W/mK » ρ = 75 kg/m³ » $\Delta L_{n,w}$ = 26 dB	40 mm
FLOOR STRUCTURE » REINFORCED CONCRETE SLAB C35/45 XC1, B500B	250 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



F5

FLOOR
$L'_{n,w}$ = 34 dB (k_2 = 2 dB)

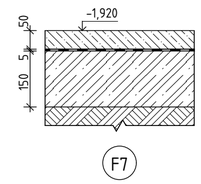
FLOORING » MARMOLEUM FORBO VIVACE	3 mm
ADHESIVE » FORBO EUROSAFE LINO PLUS (0,4 kg/m²)	1 mm
LEVELING BOARDS » FORBO QUICKFIT PANELS	7 mm
DISTRIBUTION LAYER » CEMENT SCREED CEMFLOW » ON PE FOIL SEPARATION LAYER	50 mm
ACOUSTIC INSULATION » MINERAL WOOL ISOVER T-N » λ_U = 0,039 W/mK » ρ = 75 kg/m³ » $\Delta L_{n,w}$ = 26 dB	40 mm
FLOOR STRUCTURE » REINFORCED CONCRETE SLAB C35/45 XC1, B500B	250 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



F6

BALCONY

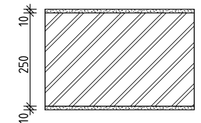
FLOORING » FROST RESISTANT CERAMIC TILES 200x200 mm » TAURUS COLOR (ACCORDING TO ARCHITECTONICAL STUDY)	9 mm
ADHESIVE » WEBER.FOR FLEX » FLEXIBLE AND FROST RESISTANT » ON ACRYLIC PENETRATION PAINT WEBER.PODKLAD A (1:5)	10 mm
WATERPROOF AND SEPARATION LAYER » PE MAT SCHLÜTER-DITRA 25	2,5 mm
SLOPING LAYER 2% » CONCRETE SCREED WEBER.BAT BALKONOVÝ » ON ACRYLIC PENETRATION PAINT WEBER.PODKLAD A (1:5)	20-49 mm
FLOOR STRUCTURE » REINFORCED CONCRETE SLAB C35/45 XC4, B500B	160 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



F7

FLOOR IN INS. CHANNEL

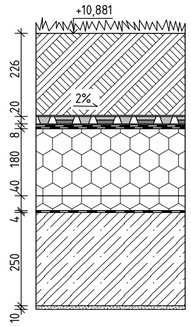
DISTRIBUTION LAYER » CONCRETE SCREED » REINFORCEMENT BAR MESH (KARI) 150x150 mm	50 mm
WATERPROOF LAYER » FATRAFOL PVC	4 mm
BASE SLAB » REINFORCED CONCRETE SLAB C30/37 XC2, B500B	150 mm
SUBSOIL	---



W6

INTERIOR WALL
R'_w = 53 dB (k_1 = 4 dB)

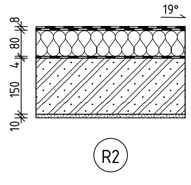
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm
WALL (INFILL) » HELUZ AKU 25 » λ_U = 0,330 W/mK	250 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



R1

GREEN ROOF
U = 0,163 W/m²K

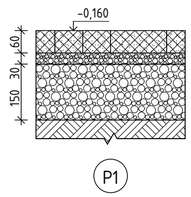
EXTENSIVE TYPE FLORA » ZINCO "SEDUM CUTTINGS"	---
SYSTEM SUBSTRATE » ZINCO "SEDUM CARPET" » STABILIZATION LAYER	60-226 mm
HYDROACCUMULATION AND FILTRATION » FIXODRAIN XD 20 WITH ZINCO FILTER SHEET PV » PE SHEET	20 mm
ROOT BARRIER » ZINCO ROOT BARRIER WSF 40 » PE-LD MEMBRANE	0,36 mm
TOP WATERPROOF LAYER » ELASTEK 40 SPECIAL MINERAL (POLYESTER MAT) » FULLY WELDED TO THE BOTTOM WATERPROOF LAYER » s_d = 116 (±6) m	4 mm
BOTTOM WATERPROOF LAYER » GLASTEK 40 SPECIAL MINERAL (GLASS FABRIC) » s_d = 112 (±6) m » FIXED BY ANCHORING SCREW WITH PLASTIC EXTENSION	4 mm
THERMAL INSULATION » EPS 150 S (MINIMAL THICKNESS 220 mm) » λ_U = 0,038 W/mK » ρ = 25 kg/m³ » FREE LAID	180 mm
THERMAL INSULATION - WEDGE 2% » EPS 150 S » λ_U = 0,038 W/mK » ρ = 25 kg/m³ » FREE LAID	40-312 mm
VAPOUR BARRIER » GLASTEK 40 SPECIAL MINERAL (GLASS FABRIC) » s_d = 112 (±6) m » SPOT WELDED TO THE FLOOR STRUCTURE » ON PENERTATION PAINT DEKPRIMER (0,3-0,4 kg/m2)	4 mm
FLOOR STRUCTURE » REINFORCED CONCRETE SLAB C35/45 XC4, B500B	250 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



R2

ROOF OF ROOF ENTRANCE
U = 0,210 W/m²K

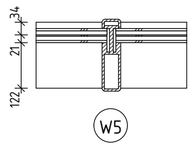
TOP WATERPROOF LAYER » ELASTEK 40 SPECIAL MINERAL (POLYESTER MAT) » FULLY WELDED TO THE BOTTOM WATERPROOF LAYER » s_d = 116 (±6) m	4 mm
WATERPROOF LAYER » GLASTEK 40 SPECIAL MINERAL (GLASS FABRIC) » s_d = 112 (±6) m » FIXED BY ANCHORING SCREW WITH PLASTIC EXTENSION	4 mm
THERMAL INSULATION » KINGSPAN KOOLTHERM K5 PIR PANELS » λ_U = 0,021 W/mK » ρ = 35 kg/m³ » FREE LAID	80 mm
VAPOUR BARRIER » GLASTEK 40 SPECIAL MINERAL (GLASS FABRIC) » s_d = 112 (±6) m » SPOT WELDED TO THE FLOOR STRUCTURE » ON PENERTATION PAINT DEKPRIMER (0,3-0,4 kg/m2)	4 mm
FLOOR STRUCTURE » YTONG FLOOR PANEL	150 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



P1

PAVEMENT

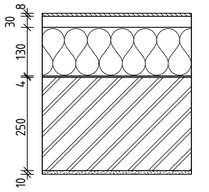
INTERLOCKING PAVEMENT » CONCRETE INTERLOCKING TILES » BEST KARO (ACCORDING TO ARCHITECTONICAL STUDY)	60 mm
LAYING LAYER » CRUSHED STONE WITH FRACTION 2-5 mm	30 mm
BEARING LAYER » CRUSHED STONE 2-5 & 4-8 mm (1:1)	150 mm
SUBSOIL	---



W5

GLASS FACADE
U = 0,983 W/m²K

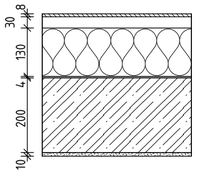
GLASS FACADE » SCHÜCO FW 50°.SI GLASS FACADE SYSTEM » ALUMINUM FRAME WITH DOUBLE GLAZING » COMPOSED OF TRANSOMS AND MULLIONS (50x130 mm) » HOZIONTAL SPACING 1 m » VERTICAL SPACING 1 m » U_g = 0,700 W/m²K » U_f = 1,700 W/m²K	180 mm



W1

EXTERIOR WALL
U = 0,133 W/m²K
R'_w = 53 dB (k_1 = 4 dB)

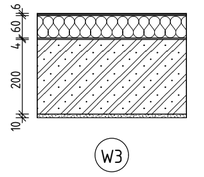
CLADDING » CEMBRIT BOARD METRO	8 mm
VENTILATED AIR GAP » WITH ALUMINUM BEARING CONSTRUCTION FOR CLADDING	30 mm
THERMAL INSULATION » KINGSPAN KOOLTHERM K15 PIR PANELS » λ_U = 0,020 W/mK » ρ = 35 kg/m³ » CONNECTED BY ADHESIVE AND MECHANICAL ANCHORS	130 mm
ADHESIVE » CEMENT ADHESIVE COMPOUND PROFIMIX LM 710	4 mm
MASONRY (NON LOAD-BEARING) » HELUZ AKU 25 » λ_U = 0,330 W/mK	250 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON PENETRATION PAINT PROFIMIX PZ	10 mm



W2

EXTERIOR WALL
U = 0,145 W/m²K
R'_w = 57 dB (k_1 = 2 dB)

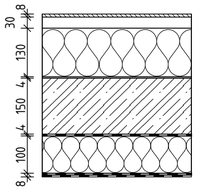
CLADDING » CEMBRIT BOARD METRO	8 mm
VENTILATED AIR GAP » WITH ALUMINUM BEARING CONSTRUCTION FOR CLADDING	30 mm
THERMAL INSULATION » KINGSPAN KOOLTHERM K15 PIR PANELS » λ_U = 0,020 W/mK » ρ = 35 kg/m³ » CONNECTED BY ADHESIVE AND MECHANICAL ANCHORS	130 mm
ADHESIVE » CEMENT ADHESIVE COMPOUND PROFIMIX LM 710	4 mm
WALL (LOAD-BEARING) » REINFORCED CONCRETE WALL C30/37 XC4, B500B » λ_U = 1,580 W/mK	200 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



W3

WALL OF ROOF ENTRANCE
U = 0,229 W/m²K
R'_w = 41 dB (k_1 = 2 dB)

PAINT » ACRYLIC PAINT CEMIX FAC	---
COATING » MINERAL SCRATCH COAT CEMIX 058 » ON PENETRATION PAINT CEMIX KONTAKT	2 mm
ADHESIVE AND SMOOTHING COMPOUND » CEMENT ADHESIVE COMPOUND PROFIMIX LM 710 » WITH REINFORCING MESH R131	4 mm
THERMAL INSULATION » KINGSPAN KOOLTHERM K5 PIR PANELS » λ_U = 0,021 W/mK » ρ = 35 kg/m³ » CONNECTED BY ADHESIVE AND MECHANICAL ANCHORS	60 mm
ADHESIVE » CEMENT ADHESIVE COMPOUND PROFIMIX LM 710	4 mm
MASONRY (LOAD-BEARING) » YTONG P4-500 » λ_U = 0,152 W/mK	190 mm
INTERIOR PLASTER » SINGLE-LAYER PLASTER PROFIMIX JM 303 » ON BASE AND JOINING BRIDGE PROFIMIX OM 209	10 mm



W4

ATTIC WALL

CLADDING » CEMBRIT BOARD METRO	8 mm
VENTILATED AIR GAP » WITH ALUMINUM BEARING CONSTRUCTION FOR CLADDING	30 mm
THERMAL INSULATION » KINGSPAN KOOLTHERM K15 PIR PANELS » λ_U = 0,020 W/mK » ρ = 35 kg/m³ » CONNECTED BY ADHESIVE AND MECHANICAL ANCHORS	130 mm
ADHESIVE » CEMENT ADHESIVE COMPOUND PROFIMIX LM 710	4 mm
WALL (LOAD-BEARING) » REINFORCED CONCRETE WALL C30/37 XC4, B500B » λ_U = 1,580 W/mK	150 mm
VAPOUR BARRIER » GLASTEK 40 SPECIAL MINERAL (GLASS FABRIC) » s_d = 112 (±6) m » SPOT WELDED TO THE ATTIC WALL » ON PENERTATION PAINT DEKPRIMER (0,3-0,4 kg/m2)	4 mm
THERMAL INSULATION » EPS 70 S (MINIMAL THICKNESS 220 mm) » λ_U = 0,035 W/mK » ρ = 25 kg/m³ » GLUED	180 mm
BOTTOM WATERPROOF LAYER » GLASTEK 40 SPECIAL MINERAL (GLASS FABRIC) » s_d = 112 (±6) m » LINEAR FIXATION BY METAL STRIP h. 40 mm	4 mm
TOP WATERPROOF LAYER » ELASTEK 40 SPECIAL MINERAL (POLYESTER MAT) » FULLY WELDED TO THE BOTTOM WATERPROOF LAYER » s_d = 116 (±6) m	4 mm

C19	COMPOSITIONS	A2 1:10	Bc. PETR DVOŘÁK