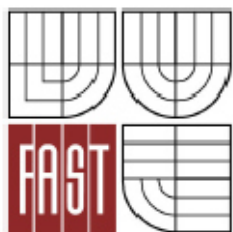




VYSOKÉ UČENÍ TECHNICKÉ V BRNĚ
BRNO UNIVERSITY OF TECHNOLOGY



FAKULTA STAVEBNÍ
ÚSTAV POZEMNÍHO STAVITELSTVÍ

FACULTY OF CIVIL ENGINEERING
INSTITUTE OF BUILDING STRUCTURES

D.1.1 CONSTRUCTIONAL SOLUTION

D.1.1.17 LIST OF COMPOSITIONS OF STRUCTURES

BAKALÁŘSKÁ PRÁCE
BACHELOR 'S THESIS

AUTOR PRÁCE
AUTHOR

VIKTOR GACH

VEDOUCÍ PRÁCE
SUPERVISOR

Ing. FRANTIŠEK VAJKAY, Ph.D.

BRNO 2015

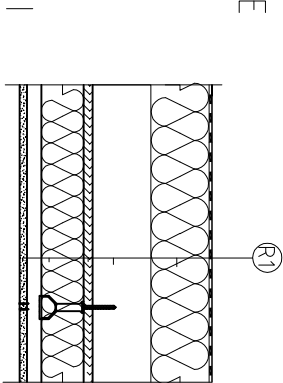
R1

CEILING ABOVE THE FIRST FLOOR

ABOVE THE FIRST FLOOR

NUMBER	FUNCTION OF LAYER	MATERIAL OF LAYER	TRADE NAME	CONNECTING, PLACING	TH. [mm]
1	WATERPROOFING	VAPOUR DIFFUSIVE FOIL	PK-FOL MP	CONNECTED BY THE HELP OF SELF STICKING TAPE, AT THE EDGES BY THE CLASPS	2
2	THERMAL INSULATION	BLOWN CELLULOSE	TEMPAL	BLOWN FREELY	100
3	STRUCTURAL MEMBER	TIMBER 100 x 80		CONNECTED TO TRUSS BY GANG NAILS, TO RING BY STEEL ANGLES WITH SCREWS	100
4	IMPROOVING VAPOUR RESISTANCE	LATEX	LATEX	BY THE ROLLER	2
5	VAPOUR BARRIER	GLUED WOOD	OSB BOARDS	TONGUE AND GROOVE, CONNECTIONS SEALED, SCREWED TO LOWER CHORD	15
6	THERMAL INSULATION	BLOWN CELLULOSE	TEMPAL	BLOWN FREELY	100
7	FINNISH LAYER	GYPSUM BOARDS	GYPSUM BOARDS KNAUF TH. 12,5 mm	SUSPENDED ON CD PROFILES	12,5
8	COATING	INNER PAINT	PRIMALEX POLAR WHITE	ROLLER	-

SCHEME OF LAYERS 1:15



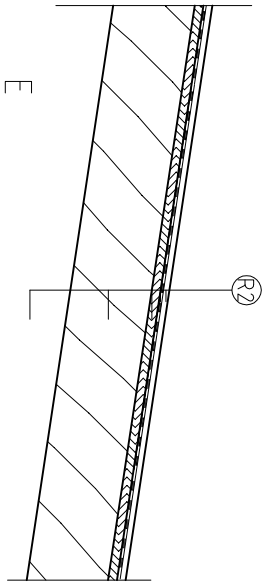
R2

ROOF STRUCTURE ABOVE VENTILATED CAVITY

ABOVE THE VENTILATED CAVITY

NUMBER	FUNCTION OF LAYER	MATERIAL OF LAYER	TRADE NAME	CONNECTING, PLACING	TH. [mm]
1	WATERPROOFING	METAL SHEETS COVERING	LINDAB SRP Click	CONNECTED BY VERTICAL JOINT, WITH CLICK SYSTEM, ANCHORED BY SCREWS W153	3
2	WATERPROOFING	VAPOUR DIFFUSIVE FOIL	PK-FOL MP	CONNECTED BY THE HELP OF SELF STICKING TAPE, ANCHORED BY THE CLASPS	2
3	STIFFENING LAYER	GLUED WOOD	OSB BOARDS	TONGUE AND GROOVE, SCREWED TO UPPER CHORD	15
4	STRUCTURAL MEMBER	TIMBER TRUSS 140x 80 mm		CONNECTED TO OTHER TRUSS MEMBERS BY GANG NAILS	140
5	VENTILATED CAVITY				average 600

SCHEME OF LAYERS 1:15



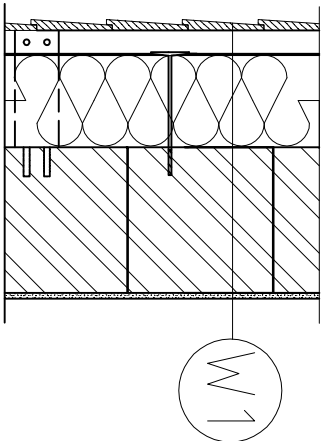
W1

PERIPHERAL LOAD BEARING WALL

PERIPHERAL WALLS

NUMBER	FUNCTION OF LAYER	MATERIAL OF LAYER	TRADE NAME	CONNECTING, PLACING	TH. [mm]
1	COATING	INNER PAINT	PRIMALEX POLAR WHITE	ROLLER	-
2	FINNISH LAYER	LIME CEMENT PLASTER, TH. 10mm	SAKRET PM	APPLIED BY THE STEEL TROWEL	15
3	LOAD BEARING	CLAY CAVITY BLOCKS	HELUZ FAMILY CUT	CONNECTED BY PU FOAM	250
4	THERMAL INSULATION	MINERAL WOOL	ISOVER TOPSIL 8	CONNECTED TO THE WALL BY PLASTIC ANCHORES	160
5	WATERPROOFING	VAPOUR DIFFUSIVE FOIL	PK-FOL MP	CONNECTED TO THE WOOL BY THE PLASTIC ANCHORES	2
6	STRUCTURAL MEMBER	TIMBER FRAME, LATHS 40X60 mm	-	CONNECTED BY THE STEEL ANGLES AND SCREWS TO THE WALL	40
7	FINNISH LAYER	WOODEN DECKING 20X140 mm	THERMWOOD UYL	SCREWED TO TIMBER FRAME	19

SCHEME OF LAYERS 1:15



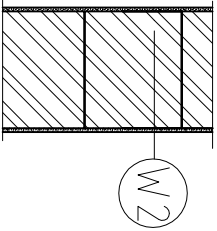
W/2

INTERNAL LOAD BEARING WALL

GROUND FLOOR

NUMBER	FUNCTION OF LAYER	MATERIAL OF LAYER	TRADE NAME	CONNECTING, PLACING	TH. [mm]
1	COATING	INNER PAINT	PRIMALEX POLAR WHITE	ROLLER	-
2	FINNISH LAYER	LIME CEMENT PLASTER , TH. 15 mm	SAKRET PM	APPLIED BY THE STEEL TROWEL	15
3	LOAD BEARING	CLAY CAVITY BLOCKS	HELUZ FAMILY CUT	CONNECTED BY PU FOAM	300
4	FINNISH LAYER	LIME CEMENT PLASTER , TH. 15 mm	SAKRET PM	APPLIED BY THE STEEL TROWEL	15
5	COATING	INNER PAINT	PRIMALEX POLAR WHITE	ROLLER	-

SCHEME OF LAYERS 1:15



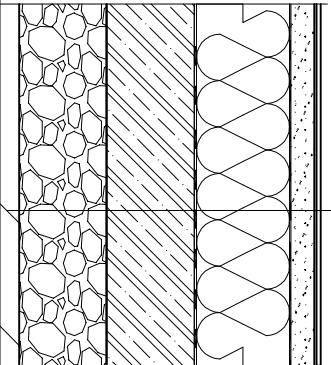
F1

HEAVY FLOOR IN CONTACT WITH SOIL- LAMINATE FLOOR

LIVING ROOM - 103, WORKING ROOM - 106

NUMBER	FUNCTION OF LAYER	MATERIAL OF LAYER	TRADE NAME	CONNECTING, PLACING	TH. [mm]
1	FINNISH LAYER	LAMINATE PLATES	FLOATING LAMINATE FLOOR PARADOR	FREELY LAID, CONNECTED BY THE MEANS OF GROOVE AND TONGUE	7
2	SEPARATION LAYER	FOAM POLYETHYLEN	MIRELON	FREELY LAID	2
3	LOAD SPREADING LAYER	ANHYDRITE SCREED	AFE 20 SAKRET	CASTED	40
4	SEPARATION LAYER	PE FOIL	PE FOIL -SAKRET	FREELY LAID	2
5	THERMAL INSULATION	EXPANDED POLYSTYREN	Isover EPS 100S	FREELY LAID	160
6	WATERPROOFING	MODIFICATED BITUMINOUS BELT "S" TYPE	ELASTOBIT GG 40	WELED TO SUBLAYER BY FLAME	4
7	STRUCTURAL MEMBER	REINFORCED CONCRETE SLAB	-	FREELY LAID, VIBRATED	150
8	LEVELLING LAYER	GRAVEL SUB BASE		FREELY LAID, COMAPCTED	50
9	ORIGINAL SUB SOIL	R4, ROCK WITH LOW STIFNESS , Rd= 400 kPa			-

SCHEME OF LAYERS 1:15



F1

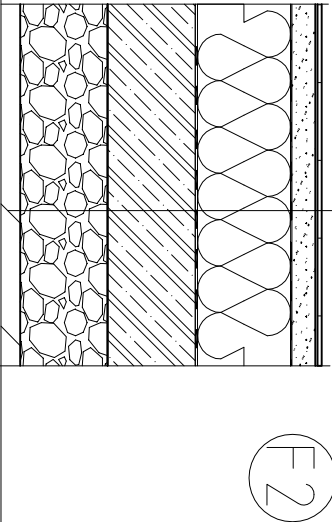
F2

HEAVY FLOOR WITH THE CONTACT WITH SOIL, CERAMIC TILES

KITCHEN- 103, CORRIDOR- 102, VESTIBULE- 101, SERVICE ROOM- 105, WORKSHOP- 107

NUMBER	FUNCTION OF LAYER	MATERIAL OF LAYER	TRADE NAME	CONNECTING, PLACING	TH. [mm]
1	FINNISH LAYER	CERAMIC	TILES RAKO STONE	GLUED BY ADHESIVE	8
2	CONNECTING LAYER	FLEXIBLE GLUE FOR CERAMIC TILES	CERAMIC TILES ADHESIVE C1T SAKRET	APPLIED BY THE STEEL TROWEL	6
3	PENETRATION LAYER	SINGLE COMPONENT SILICATE DISPERSION SEALING LAYER	PENETRATION SAKRET A&H	APPLIED BY TH ROLLER	-
4	LOAD SPREADING LAYER	ANHYDRITE SCREED	AfE 20 SAKRET	CASTED	40
5	SEPARATION LAYER	PE FOIL	PE FOIL -SAKRET	FREELY LAID	2
6	THERMAL INSULATION	EXPANDED POLYSTYREN	Isover EPS 100S	FREELY LAID	160
7	WATERPROOFING	MODIFICATED BITUMINOUS BELT "S" TYPE	ELASTOBIT GG 40	WELED TO SUBLAYER BY FLAME	4
8	STRUCTURAL MEMBER	REINFORCED CONCRETE SLAB	-	FREELY LAID, VIBRATED	150
9	LEVELLING LAYER	GRAVEL SUB BASE		FREELY LAID, COMAPCTED	50
10	ORIGINAL SUB SOIL	R4, ROCK WITH LOW STIFNESS, Rd= 400 kPa			-

SCHEME OF LAYERS 1:15



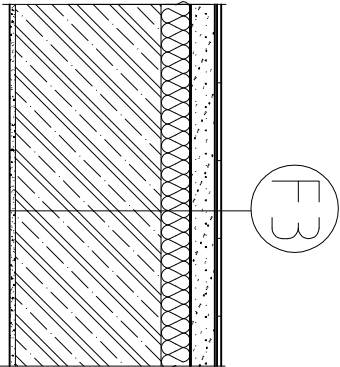
F3

FLOOR ABOVE GROUND FLOOR, CERAMIC TILES

BATHROOM - 202, WC - 203, BATHROOM OF PARENTS - 205

NUMBER	FUNCTION OF LAYER	MATERIAL OF LAYER	TRADE NAME	CONNECTING, PLACING	TH. [mm]
1	FINNISH LAYER	CERAMIC	TILES RAKO STONE	GLUED BY ADHESIVE	8
2	CONNECTING LAYER	FLEXIBLE GLUE FOR CERAMIC TILES	CERAMIC TILES ADHESIVE C1T SAKRET	APPLIED BY THE STEEL TROWEL	5
3	PENETRATION LAYER	SINGLE COMPONENT SILICATE DISPERSION SEALING LAYER	PENETRATION SAKRET A&H	APPLIED BY TH ROLLER	-
4	LOAD SPREADING LAYER	ANHYDRITE SCREED	A&E 20 SAKRET	CASTED	40
5	SEPARATION LAYER	PE FOIL	PE FOIL -SAKRET	FREELY LAID	2
6	IMPACT NOIS INSULATION	EXPANDED POLYSTYREN	Isover EPS 100S	FREELY LAID	50
7	STRUCTURAL MEMBER	REINFORCED CONCRETE SLAB, C 20/25, STEEL B500B	-	FREELY LAID, VIBRATED	250
8	FINNISH LAYER	LIME CEMENT PLASTER , TH. 15 mm	SAKRET PM	APPLIED BY THE STEEL TROWEL	15
9	COATING	INNER PAINT	PRIMALEX POLAR WHITE	ROLLER	-

SCHEME OF LAYERS 1:15



F 4	FLOOR ABOVE THE GROUND FLOOR, LAMINATE FLOOR
	CORRIDOR - 201, GUEST ROOM - 204, PARENTS BEDROOM - 206, CHILDREN ROOM - 207, CHILDREN R.-208

NUMBER	FUNCTION OF LAYER	MATERIAL OF LAYER	TRADE NAME	CONNECTING, PLACING	TH. [mm]
1	FINNISH LAYER	LAMINATE PLATES	FLOATING LAMINATE FLOOR PARADOR	FREELY LAID, CONNECTED BY THE MEANS OF GROOVE AND TONGUE	7
2	SEPARATION LAYER	FOAM POLYETHYLEN	MIRELON	FREELY LAID	-
3	LOAD SPREADING LAYER	ANHYPDRITE SCREED	AFE 20 SAKRET	CASTED	40
4	SEPARATION LAYER	PE FOIL	PE FOIL -SAKRET	FREELY LAID	2
5	IMPACT NOIS INSULATION	EXPANDED POLYSTYREN	Isover EPS 100S	FREELY LAID	50
6	STRUCTURAL MEMBER	REINFORCED CONCRETE SLAB, C 20/25, STEEL B500B	-	FREELY LAID, VIBRATED	250
7	FINNISH LAYER	LIME CEMENT PLASTER, TH. 10mm	SAKRET PM	APPLIED BY THE STEEL TROWEL	15
8	COATING	INNER PAINT	PRIMALEX POLAR WHITE	ROLLER	-

SCHEME OF LAYERS 1:15

