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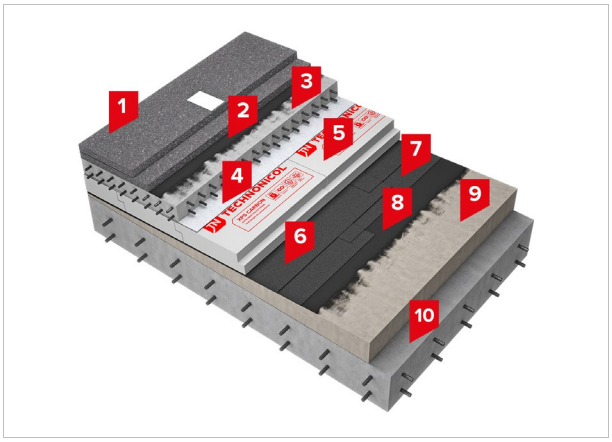
TN ROOF BRM CONCRETE AUTO

Solution for a vehicle-accessible flat roof with polymer-bitumen membrane and XPS thermal insulation



Area of application

Residential and administration buildings, multifunctional complexes, hotels, sports and healthcare facilities, business centers, shopping centers.

Advantages

- Resistance to vehicle loads
- Reliable waterproofing
- Effective thermal insulation
- Accessible technology

System composition and material consumption rates

No.	Material	Unit	Thickness, mm*	Consumption rate**
1	Two layers of asphalt concrete	–	–	acc. to calculation
2	Road bitumen emulsion	–	–	acc. to calculation
3	Reinforced concrete plate	–	min 100 mm	acc. to calculation
4	Needle-punched geotextile	m²	2.3	1.1
5	XPS TECHNONICOL CARBON SOLID 500***	m³	40, 50, 60, 100	1.03
6	ULTRAPLAST B (APP)****	m²	3.0, 4.0	1.15
7	ULTRAPLAST B (APP)*****	m²	3.0, 4.0	1.15
8	BITUMEN PRIME COATING	l	–	0.25-0.35
9	Sloping layer of sand-cement screed	–	–	acc. to calculation
10	Reinforced concrete base	–	–	acc. to calculation

*The available thicknesses of the selected thermal insulation materials are to be checked with the manufacturer.
**The consumption rates are taken conditionally – according to the manufacturer's recommendations.

Alternative materials:
***XPS TECHNONICOL CARBON SOLID 700, XPS TECHNONICOL CARBON SOLID 1000.
****ULTRAPLAST A (APP), ULTRAFLEX BRIDGE (SBS), ULTRAFLEX A (SBS).
*****ULTRAPLAST A (APP), ULTRAFLEX BRIDGE (SBS), ULTRAFLEX A (SBS).

Technical description

The inverted roofing solution accessible to vehicle traffic is installed over a reinforced concrete load-bearing structure. The system withstands a great load and reliably protects the premises below from leakages during the whole operation period.

The waterproofing system comprises two layers of APP-modified bitumen membrane ULTRAPLAST B for durable waterproofing even in extreme operating conditions. The waterproofing membrane in this system also serves as a vapor barrier. It is installed over the primed sloping layer of sand-cement screed.

In order to withstand a great load from the constant vehicle traffic, special extruded polystyrene slabs TECHNONICOL CARBON SOLID 500 are used as a thermal insulation layer. An incredibly high compressive strength of this material (more than 50 tons per square meter) makes it the best choice for the most important and complicated projects.

To evenly distribute the pressure of vehicles on the roofing system, the reinforced concrete slab is mounted, which is followed by the laying of asphalt concrete.