



ANY KIND

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THE TECHNOLOGY

WORK

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Questions that you have to ask for any kind of technology:

- 1) What is the technology that we are talking about?
- 2) What is the previous technology and the previous activity?
- 3) What are the layers of the structure that it belongs to?
- 4) What is the structure that it lays on, or fixed to or contacted anyway?

4a) What are the attributes of these structures and material?

4v) How can we check these?

5) What is the details of the technology that we are talking about?

/ what activities does it contain?

- a) Can you divide it to parts, to activities?
- b) What are the materials?
- c) What is the volume of each material?
- d) How can you transport, deliver and move the material to and on the site?
- e) What kind of tools and equipments do you need?
- f) How many workers and other resource do you need for each activity?
- g) How long does each activity last and what is their sequence?
- h) In what weather conditions are you allowed to do the activites?
- i) What kind of infrastructure do you need for the constr?



WATER PROOFING MATERIALS

material	bitumen	PVC	rubber	
what is it for	$\overline{\bullet}$	\bigcirc		
against of ground water	X			
operational water				
wheather (rain, snow)				
supporting material	nothing or fibe	rglass or fiber steel		
covering material on the material	depends on the	e cicumstances (UV)		
underlayer material	Concrete, h	eating insulation, etc		
fixing the material:	$\overline{\bullet}$	$\overline{\bullet}$	$\overline{\bullet}$	
mechanical			X	WHAT IS IT?
stuck / glued			<u>.</u>	
flame melting				
welding		<u>.</u>		
on the edges	Mechanical by a belt of zinc (not the same kind for all!)			
the gully	Different kind o	of material for each!		
min slopes	2-4% underlay is	1-2% concrete or heating ir	0-1% sulation	



WATER PROOFING MATERIALS

material	bitumen	PVC	rubber
Stripping, shape of a pack of the material	D~35 cm, H~110cm	D~35 cm, H~200cm	X~150 cm,Y~150cm, Z~100cm
	ROLL ~35 kg	ROLL ~50 kg	MEMBRANE ~350 kg
	BUCKEI ~25 kg		



BEFORE START THE CONSTRUCTION OF THE WATER PROOFING

CHECK THE STRUCTURE

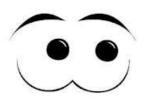
CONTROLL THE UNDER LAYER (dimensions, slopes, etc)







CHECK THE SITE (infrastructure, possibilities of the site)



CHECK THE TRANSPORTATION POSSIBILITIES





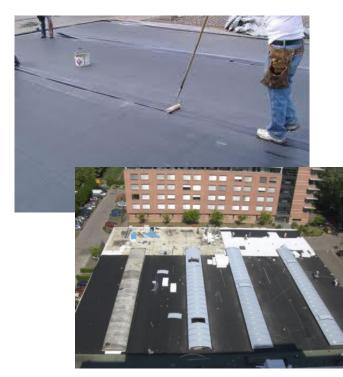


TOOLS AND EQUIPMENT FOR EPDM (rubber) MEMBRANE









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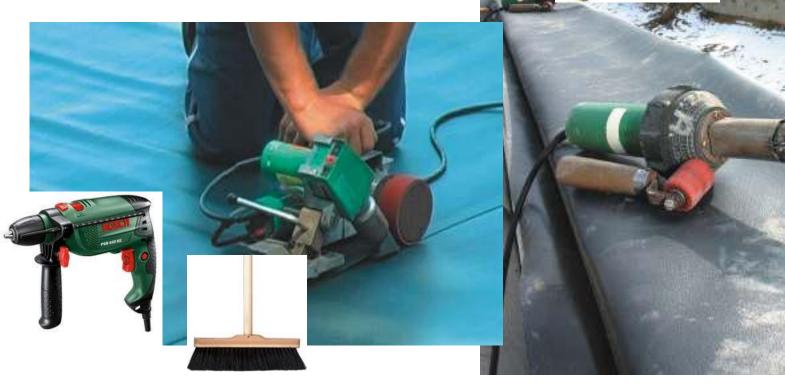
Grouping





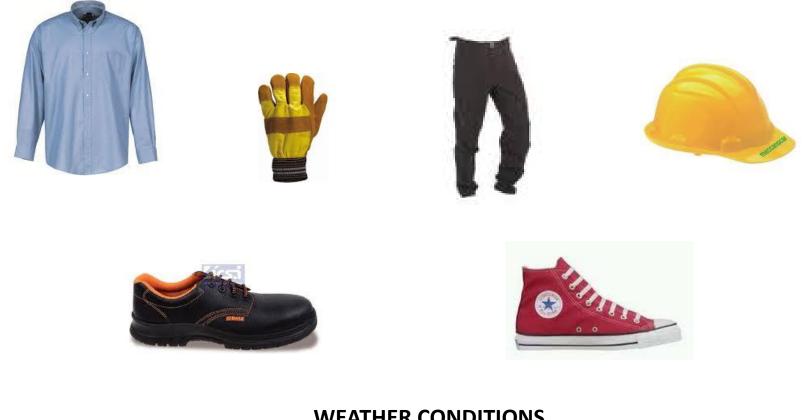
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HEALTH AND SAFETY CLOTHES



WEATHER CONDITIONS

WIND? SUN? **SNOW**? **RAIN? TEMPERATURE?**

INFRASTRUCTURES?

CONTROL THE FINALIZED STRUCTURE!!!



HEATING INSULATION

START WITH THE SAME QUESTIONS!!!

what is it for? Function?

- 1) Heating insulation?
- 2) Under layer?
- 3) Separates layer?
- 4) Creates slopes?
- 5) Carrying load?



HEATING INSULATION MATERIALS



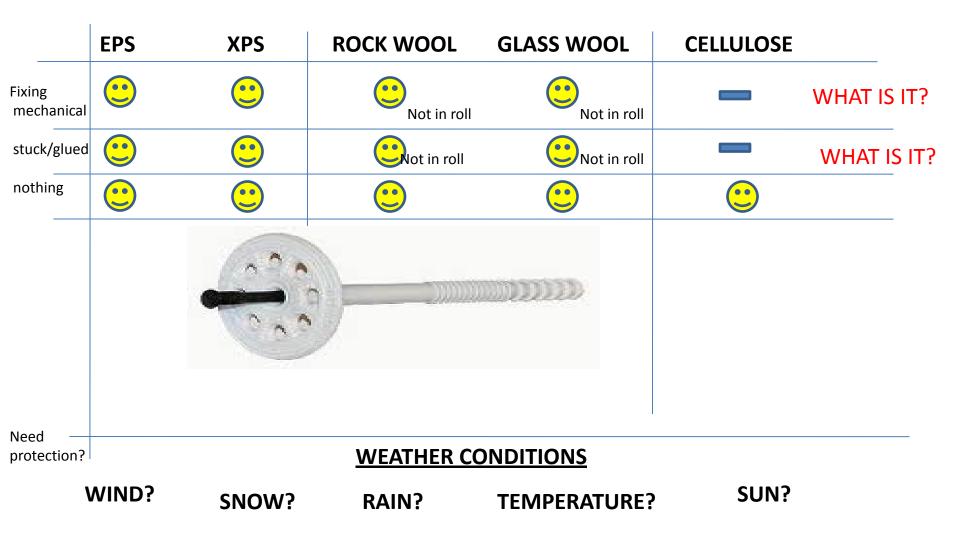


HEATING INSULATION MATERIALS

	EPS XPS	ROCK WOOL GLASS WOOL	CELLULOSE		
	Boards, sheets Rolls if <2cm thick	Boards Rolls	Bulky, spread		
dimensions	X=50cm Y=100cm Z=2;5;8;10; 12cm 15-20 kg/m3	X=50cm Y=100cm (up to 500cm in rolls) Z=2;5;8;10; 12cm 30-40 kg/m3	X=50cm Y=100cm Z=30cm 14,5 kg/package 35-40 kg/m3		
covering surface	Nothing Some kind of bo Its own extruded	Nothing			
underlay	Concrete, plaster, timber boarding, gypsum boarding, etc				
	+ water proofing				



HEATING INSULATION MATERIALS





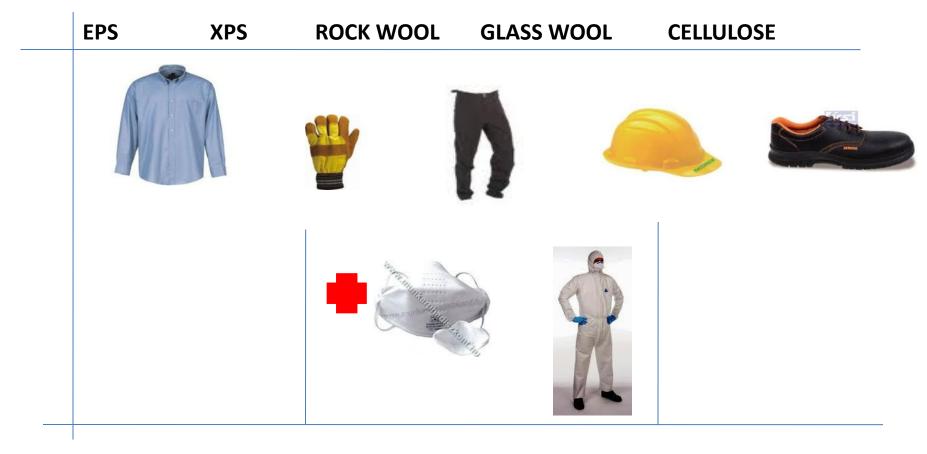
Grouping

TOOLS AND EQUIPMENT





HEATING INSULATION MATERIALS

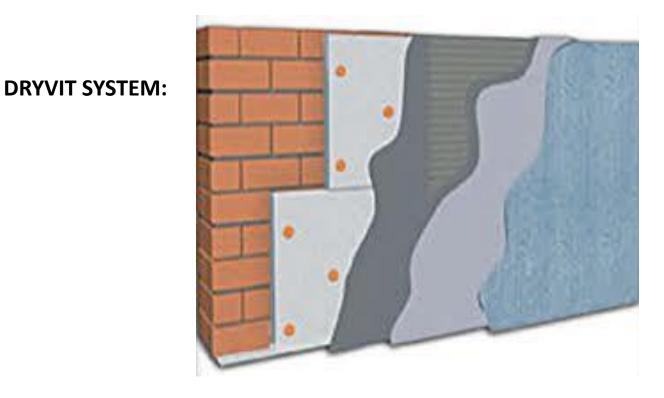


Need protection?

WEATHER CONDITIONS (indoor, outdoor?...)



Grouping



CHECK THE FINALIZED STRUCTURE!



Thank you for listening!