



WICI Waterproofing & Insulation Composite Integration Panel
—— Wet-application System

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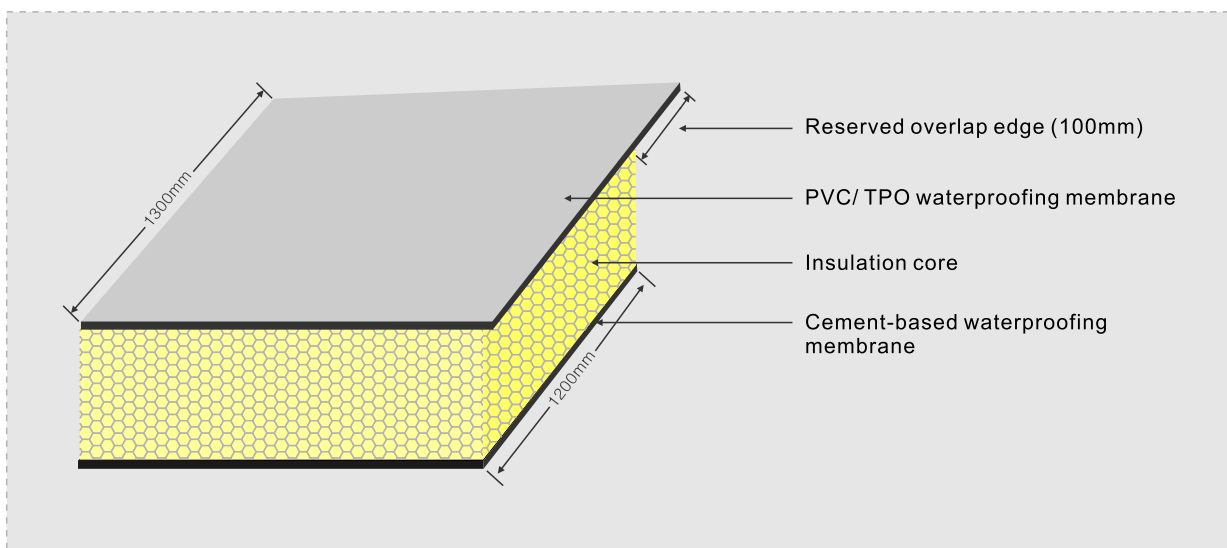
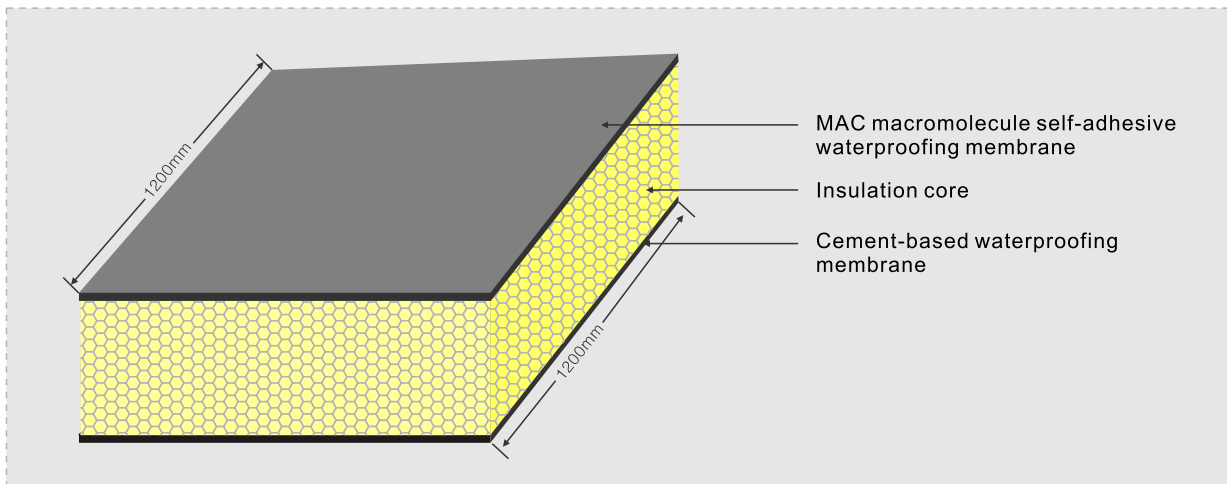
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WICI Waterproofing & Insulation Composite Integration Panel — Wet-application System



JOABOA WICI Waterproofing & Insulation Composite Integration Panel is a system product comprised of FM Approved TPO/PVC roofing sheets or MAC Macromolecule Self-adhesive Waterproofing Membrane on top, rigid polyurethane foam or rock wool as insulation core in the middle and cement-based waterproofing membrane on the bottom by special production technology, which can be firmly bonded to concrete structure layer by polymer cement. This system not only can safeguard the roof's waterproofing effect by eliminating the fluid channeling between the waterproofing layer & insulation core, insulation core & substrate surface, but also can simplify the application technology and diminish systemic risk, greatly improve the comprehensive energy conservation effect.

Material Structure



Specifications

	Thickness(mm)	Width(mm)	Length(m)
MAC macromolecule self-adhesive waterproofing membrane	1.5	1200	5/7.5/10
PVC/TPO waterproofing membrane	1.2	1300	
Cement-based Waterproofing Membrane	/	1200	
Insulation core	/	1200	
Total thickness of the panel	30/40/50/60/70/80/90/100	/	

Product Features

- **One Step, Two Functions**
Special "sandwich" structure, to achieve waterproofing and insulation functions by one step.
- **Efficient and Energy-saving, Durable Performance**
As the insulation core is not absorbent and no fluid channeling inside of the panel, the waterproofing & insulation composite system can show long-lasting stable performance.
- **Convenient and Fast for Construction, Time-saving**
All the traditional construction processes like screed-coat, insulation layer, waterproofing layer and protective layer have been combined into one step. The whole construction period will be greatly reduced.
- **Cost-saving, Cost-effective**
Simplest roof structure, no need of screed-coat and protective layer, excellent waterproofing & insulation effect will be fulfilled by convenient construction method, performance-price ratio enhanced greatly.
- **Energy Conservation and Emission Reduction, Environment-friendly**
Compared with the traditional roofing system, from the very beginning of material production, construction process to the later maintenance, great efforts has been made to cut down emissions and save energy.
- **Certified by Authoritative Test Organization, Credible Quality**
World-class level, passed authorized certification issued by FM Approvals, USA.

Technical Standard

Dimensional Deviation of WICI Panel and Apparent Quality

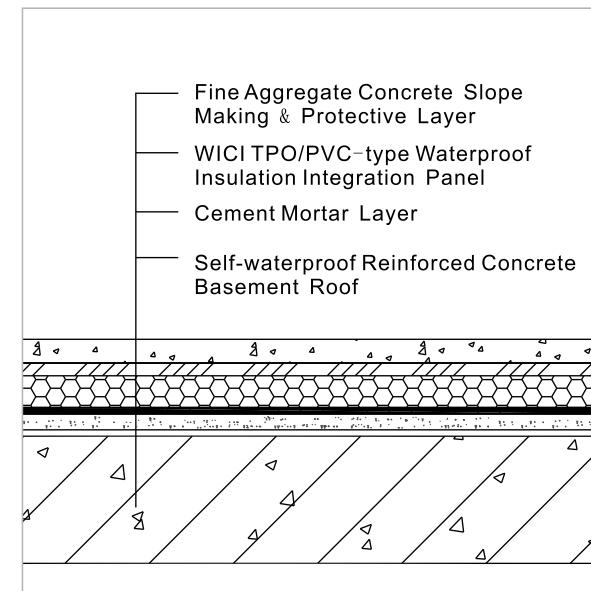
Series	Items	Allowable Dimensional Deviation Value	
		Value of Insulation Core	Value of Waterproofing Layer
1	Length,mm	± 2.0	
2	Width,mm	± 2.0; Overlap Edge Width ≥7.5	
3	Thickness,mm	Insulation Layer Thickness ≤50	± 1.5
4		Insulation Layer Thickness > 50	± 2.0
5	Diagonal Deviation,mm	± 3.0(not included the waterproofing overlap edge)	
6	Apparent Quality	The surface and edge should be neat, no crack, pin hole, adhesion, bubbles and scars, straight incision, neat section, no burr, with dense insulation core material.	

Principal Physical Properties of WICI Panel

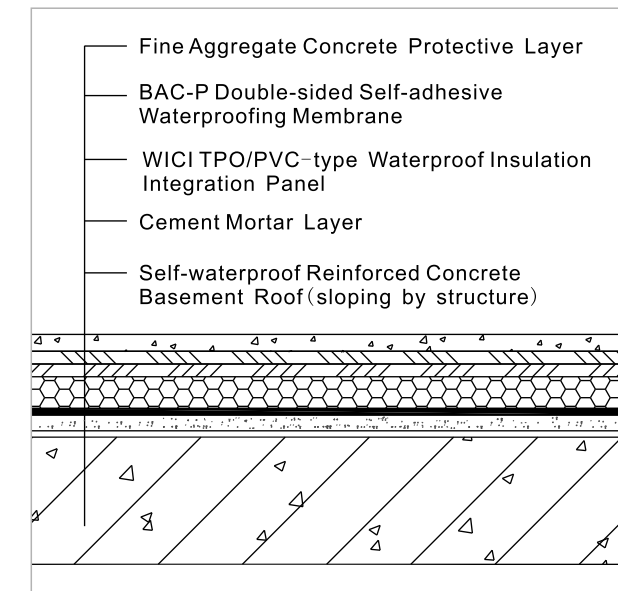
Series	Items	Index	
		Rock Wool	Rigid PU Foam
1	Bonding Strength between Facing and Insulation Material, Mpa	≥ 0.1, The destruction site shall not be located at the bonding interface	
2	Combustion Performance Grade	Not less than A2 level	Not less than B2 level
3	Apparent Density of Insulation Core, kg/m ³	≥ 100	≥ 40
4	Thermal Conductivity Coefficient (23°C ± 2°C), [W/(mk)]	≤ 0.048	≤ 0.024
5	Compression Performance (deformation 10%), Mpa	≥ 0.15	
6	Water Absorption of Insulation Material (V/V%)	≤ 3	≤ 1
7	Oxygen Index (%)	≥ 26	

Recommended Construction Design

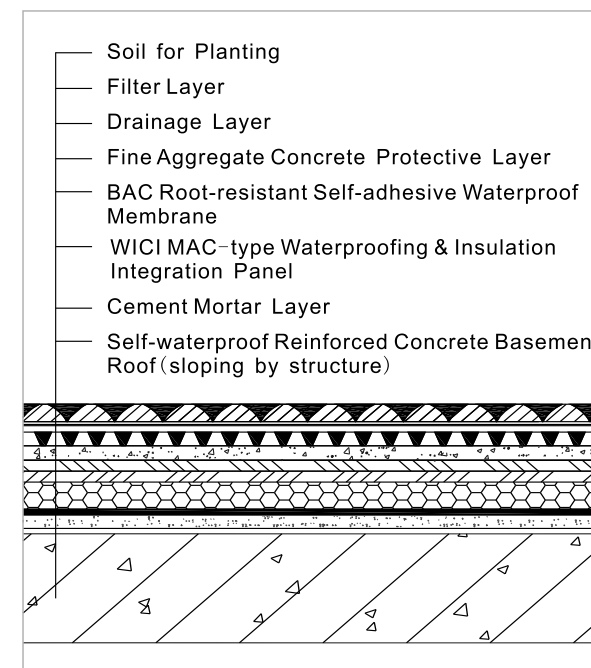
Basement Roof(Scheme 1)



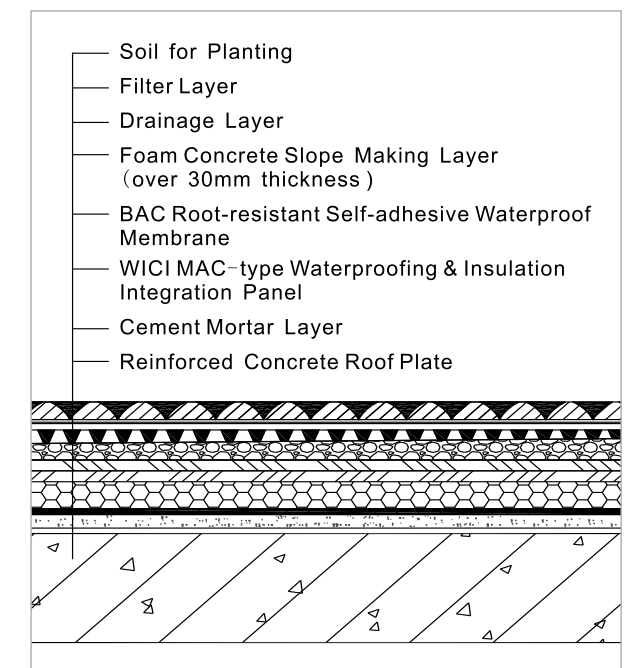
Basement Roof(Scheme 2)



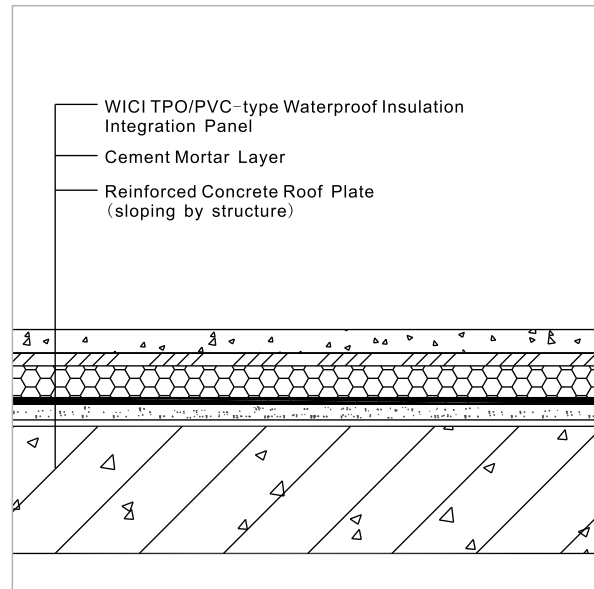
Basement Planting Roof



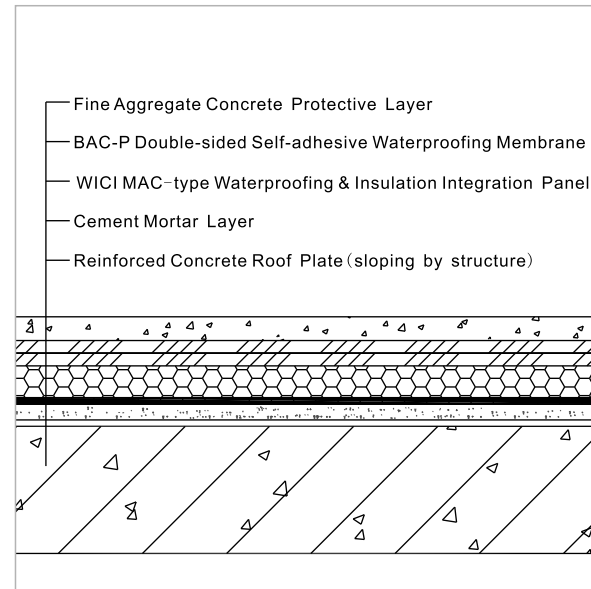
Planting Roof



Roof (Scheme 1)



Roof (Scheme 2)



Main Construction Equipment

- Cutting Machine
- Electric Panel Cutting Machine
- Ink Fountain
- Automatic Walking Hot Air Welding Machine, Hand-held Hot Air Welding Gun (for WICI TPO/PVC-type Panels)
- Heating Device
- Compression Roller
- Lifting Equipment (for WICI Panel)
- Cutting Knife
- Shovel

Note: Choose the relative construction equipment according to the type of WICI Panel CHOSEN.

Construction Technology

Substrate Treatment

- Remove the debris, oil, sands, projecting stones on the substrate surface. Cleaning work must be carried out at any time during the construction if needed.
- The substrate should be repaired neatly, and plugging work should be conducted especially for the possible leakage places like internal and external corners, pipe roots.
- Clean the substrate if there is visible water on it.
- All kinds of embedded parts should be pre-installed and fixed.

Construction Processes



Substrate Treatment



Stir Cement Mortar



Cut WICI Panels



Paste Cement Mortar



Pre-pave WICI Panels, Positioning and Snapping the Line



Wet the Substrate



Pave WICI Panels



Press Panels with Compression Roller



Grouting Treatment (For WICI MAC-type)



Edging Treatment



Paste Self-adhesive Waterproofing Membrane



Overlapping Treatment



Construction Completion



Check and Acceptance

Auxiliary Materials

- TPO/PVC Waterproofing Membrane.
- BAC Double-sided Self-adhesive Waterproofing Membrane .
- Pipe Collars and Depression Bars(for the fixing of membranes around roofing pipes and parapet wall areas).
- Joint Sealing Materials used between WICI Panels .

Note: Choose the relative auxiliary materials according to the type of WICI Panel CHOSEN.

Transportation and Storage

- The WICI panel should be placed flatwised during transportation and storage.
- Keep away from fires during transportation and storage.
- It's forbidden to let WICI Panels get in touch with the organic solvent directly.
- Fix WICI Panels with safety belt during the vertical transportation.

Honor



National Key New Product Certificate Awarded by China Science and Technology Ministry



WICI Waterproofing & Insulation Integration System has been written into China National Construction Standard Design Atlas.



FM Approval Certificate

Landmarks



The Number One Condominium Jomtien Pattaya Phase 1



Morgan Tower

Landmarks



La Vista One



Lingnan Garden



Pattaya Palm Spring Villas Phase 1



Pattaya Plam Lakeside Phase 1



Tanzania National Stadium
—China's Key Foreign Aid Project



The Winter Olympics in Beijing Zhangjiakou
—The First Winter Olympics in China

Landmarks



Shenzhen Bao'an International Airport
—The Largest Single Building in Shenzhen.



Ministry of Public Security Office Building
—Another Landmark in Tian'anmen Area



Tianjin Binhai International Airport



National Museum of China



Binhai Building of TECENT
—TECENT Global Headquarter Base



The First Affiliated Hospital of Zhengzhou University
—The Largest Hospital in the World

Manufacturing Bases



Wuhan Joaboa Technology Co.,Ltd



Suzhou Joaboa Technology Co.,Ltd



Tianjin Joaboa Technology Co.,Ltd



Chengdu Joaboa New Style Building Materials Co.,Ltd



Foshan Toyu Building Materials Co.,Ltd



Hubei Joaboa Building Energy Saving Technology Co.,Ltd



Huizhou Joaboa Technology Co.,Ltd

Joaboa Tech has invested USD 8,333,334 to set up an excellent self-adhesive membrane product line by introducing advanced facilities from American A&D company.

Joaboa Tech has formed industrial layout network the whole China first. With advanced facilities, strict QMS and excellent environmental facilities, Joaboa make sure good quality for it's products.

JOABOA TECHNOLOGY

JOABOA TECHNOLOGY PIONEER OF WATERPROOFING & INSULATION