VISION

Improving people's lives by reimagining spaces

everest

“

SUSTAINABLE DEVELOPMENT REQUIRE HUMAN INGENUITY. PEOPLE ARE THE MOST IMPORTANT RESOURCE

Dan Shechtman

Everest contributes to the construction of **sustainable habitats** through its Wall, Ceiling & Cladding systems.

Reduces impact on the environment

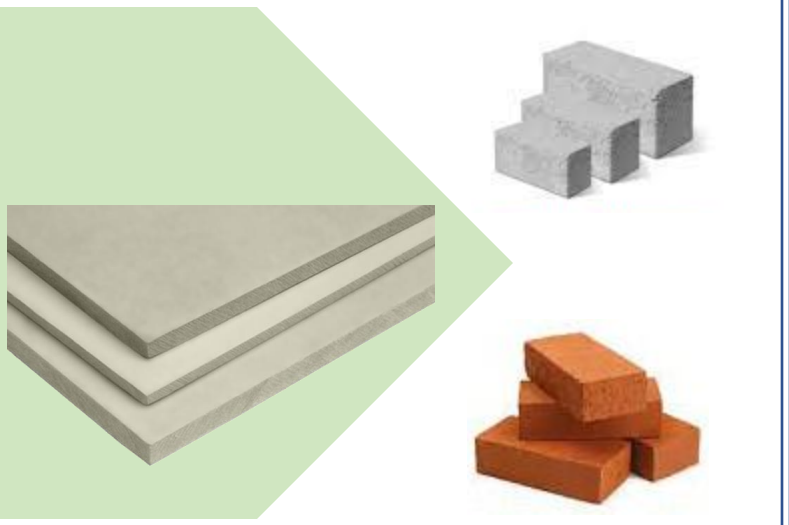
12% construction water consumption

40% of all energy use

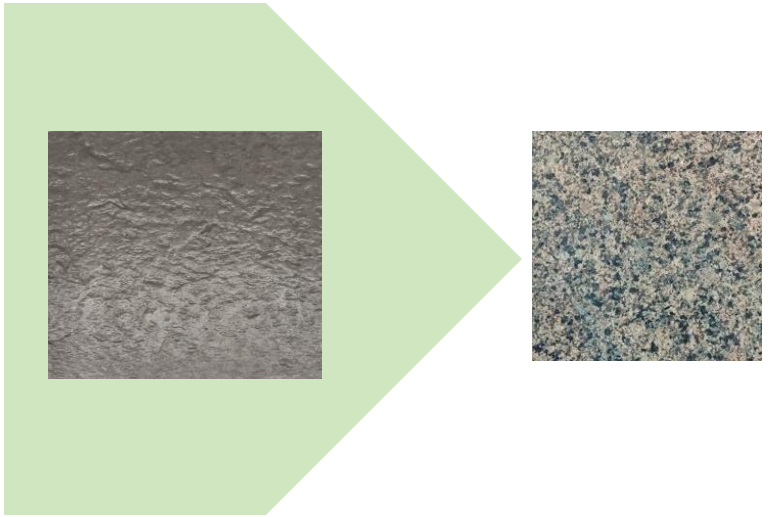
30% of green house emission

40% of solid waste generation

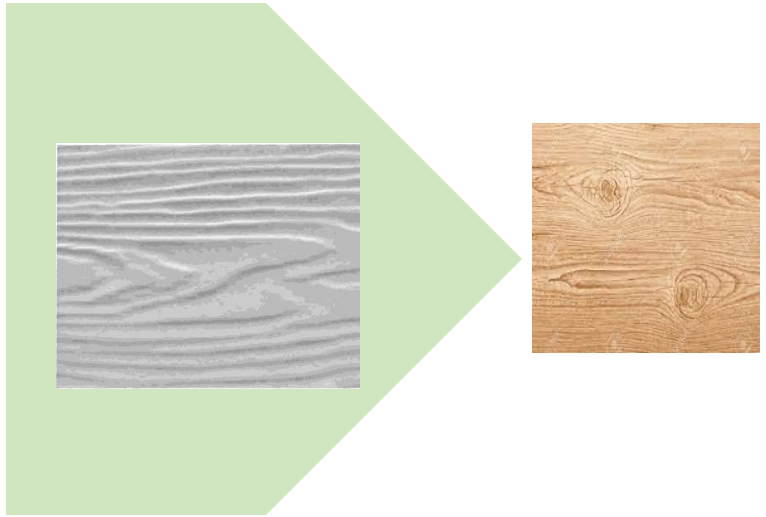
Everest emphasizes and contributes towards **Eco-friendly construction methods**, through its Eco-innovative products & solutions, that reduces operational use of resources (particularly energy & water) in buildings & infrastructures.



Everest Board replaces bricks & blocks



Everest Artestone replaces natural stone



Everest Artewood replaces natural wood

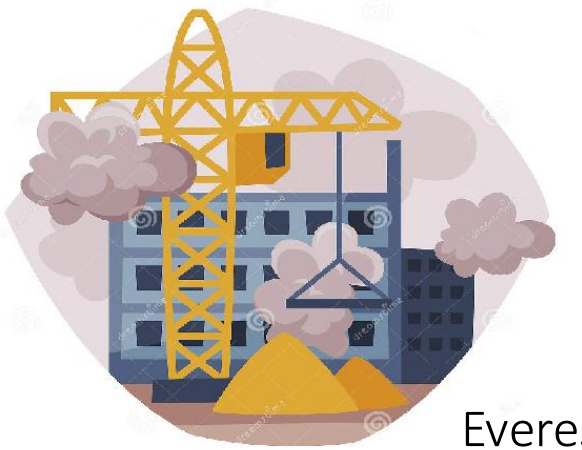
Everest Wall & Cladding solutions substantially improves the building envelope performance; Prevent top- soil erosion

Everest solutions are built through Dry construction technique that saves precious water.

Contribute towards reduction in environmental impact during construction & building life cycle.

World Health Organization (WHO) recognizes **air pollution as the world's biggest environmental and health threat.**

Each year, **approximately 3.7 million people die** premature deaths globally due to outdoor air pollution.



Construction is responsible for up to 50% of climate change & it **contributes to 23% of air pollution**

Everest pre-fabricated solutions installed with dry construction techniques eliminates air pollution at construction sites

Everest building solution reduces **construction waste**.

Reduces transportation

Reduces crane activity

Built with dry construction techniques there is less mess on the job site

Everest walls are 6 times lighter than traditional walls

Light weight shallow foundation design

Less weight handling eventually when the building is deconstructed

Less manual handling by installers.

Everest facilitates designing & installation of its solutions with **SPEED & SAFETY.**

Everest solutions are installed at 4X speed as compared to traditional brick block masonry

Dedicated strong R&D for developing Eco-friendly products

Experienced design team for customized building solutions

Pre & post project site supervision

Everest trains its installers to ensure that the solutions offered are installed in best conditions with speed & safety

Through

PEHCHAN– A formal introduction of Everest products & solutions

KAUSHAL – hands on training at dedicated training centres & on-site training.

Everest solutions takes care of **building occupant's comfort & health**

- **Acoustic comfort:** Better sound insulation. Everest wall solutions provide Rw 60dB sound insulation as compared to Rw 40dB for traditional walls

- **Thermal comfort:** Everest wall are 4X more thermal insulating than traditional walls. Everest external wall & insulated cladding system reduces building energy demand significantly.

- **Visual comfort:** Aesthetic wall, ceiling & cladding solutions

- **Flexibility:** Easy to install as per required heights & thicknesses; and to be removed during lifetime.

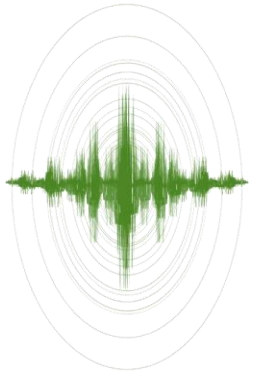
- Moisture & weather resistant

- Insect & rodent resistant

- Easy Maintenance

Everest solutions takes care of **building occupant's safety**

- **Fire Safety:** Everest offers its building solutions with high fire resistance ratings & excellent product fire properties. They are non-combustible, not easily ignitable, restricts propagation of flame, low smoke emission & no fire droplets.



- **Seismic Safety:** Light weight Everest wall solutions are ideally suited for earthquake prone areas & are designed for seismic loading conditions

- **Stability:** Solution can be specified even in conditions exposed to mechanical stress in the building; Fibre Cement board are also suitable for flooring element

- **Impact Resistance:** All solutions are aligned to SEVERE DUTY impact resistance, which are similar to traditional systems.

EVEREST EXTERNAL CLADDING SYSTEM

EVEREST ARTESTONE & ARTEWOOD – REPLACING NATURAL STONE & WOOD

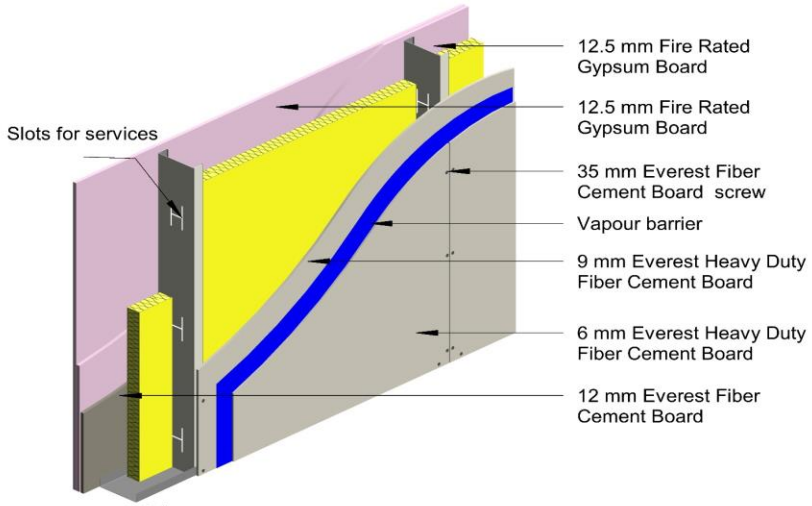
everest

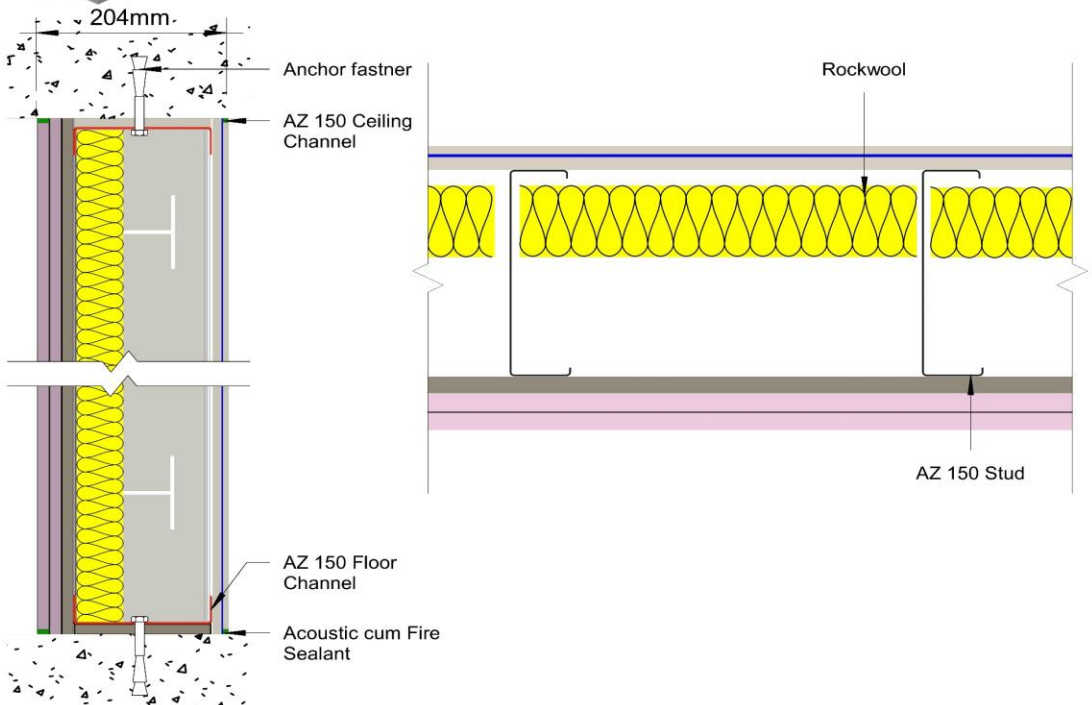
Replacing natural wood on the exterior & interior of the building with Everest ARTEWOOD

W Hotel by Marriott, Goa


Replacing natural stone on the exterior of the building with Everest ARTESTONE
JK & JNS Dew Turkey

EVEREST EXTERNAL WALL SYSTEM

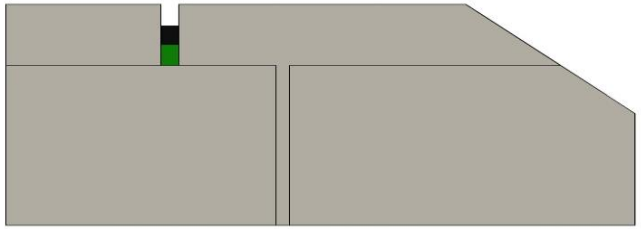




IMPROVES BUILDING ENVELOPE PERFORMANCE; CONTRIBUTES TOWARDS REDUCTION IN BUILDING ENERGY DEMAND

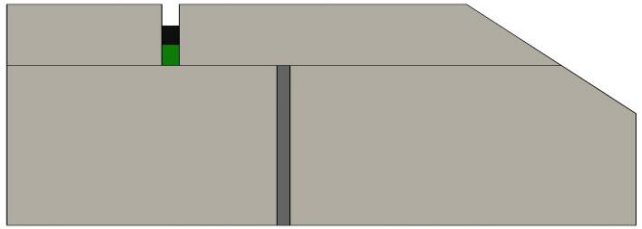
Surface finishing system

1



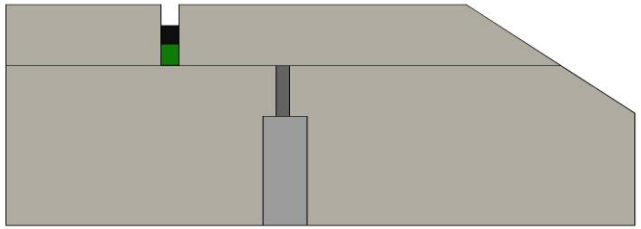
Joints of Internal 9mm Everest Heavy Duty Fiber Cement Board sealed with backer rod & sealant

2



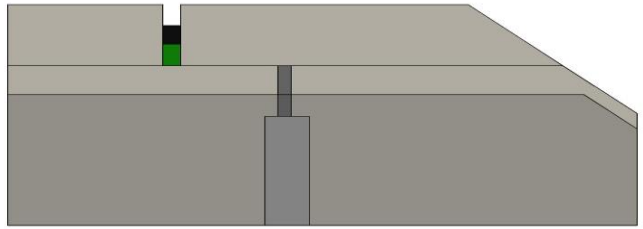
Joints of exposed 6mm Everest Heavy Duty Fiber Cement Board sealed with primer modified morter

3



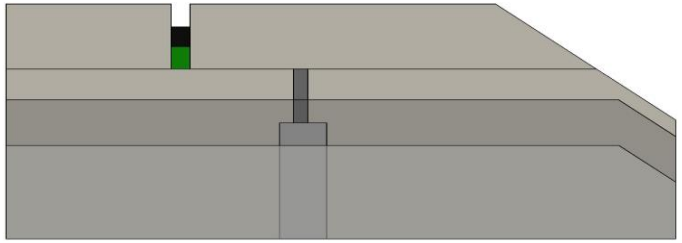
Taping of joints on exposed board

4



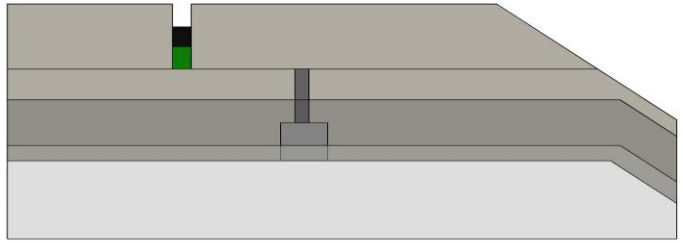
1st Coat of diluted (30% water) waterproofing solvent

5



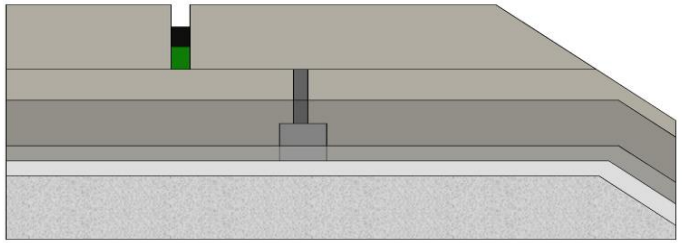
2nd Coat of undiluted waterproofing solvent

6



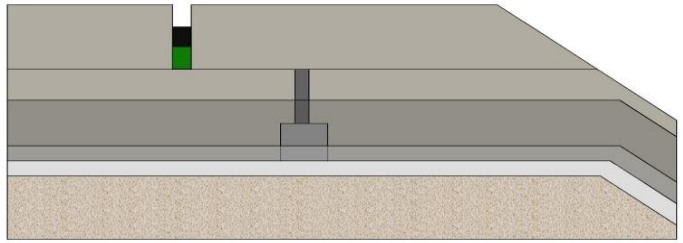
3rd Coat of undiluted waterproofing solvent

7



Acrylic modified texture finishing render coat

8



Surface finished with external grade primer and paint

OPTION - 1

Water proofing Finishing system

1

Joints of Internal 9mm Everest Heavy Duty Fiber Cement Board sealed with backer rod & sealant

2

Joints of exposed 6mm Everest Heavy Duty Fiber Cement Board sealed with primer modified morter

3

Application of base coat modified morter

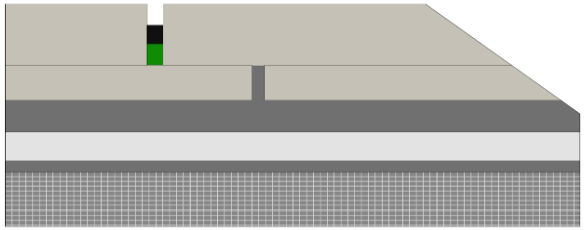
4

Pasting of EPS over modified morter

5

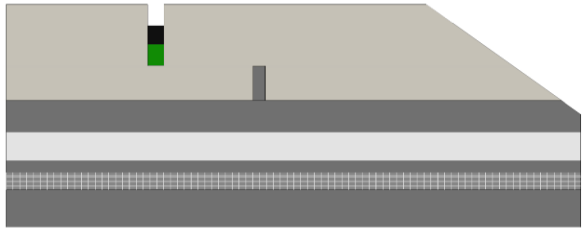
Application of second coat modified morter base coat over EPS

6



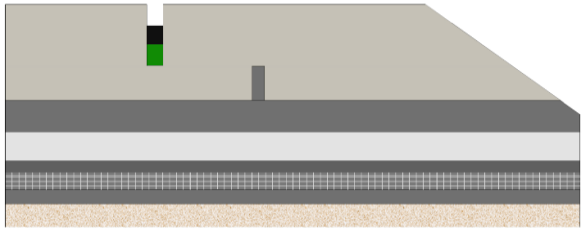
Embedding of fiber tape over base coat

7



Application of top coat modified morter over fiber mesh

8

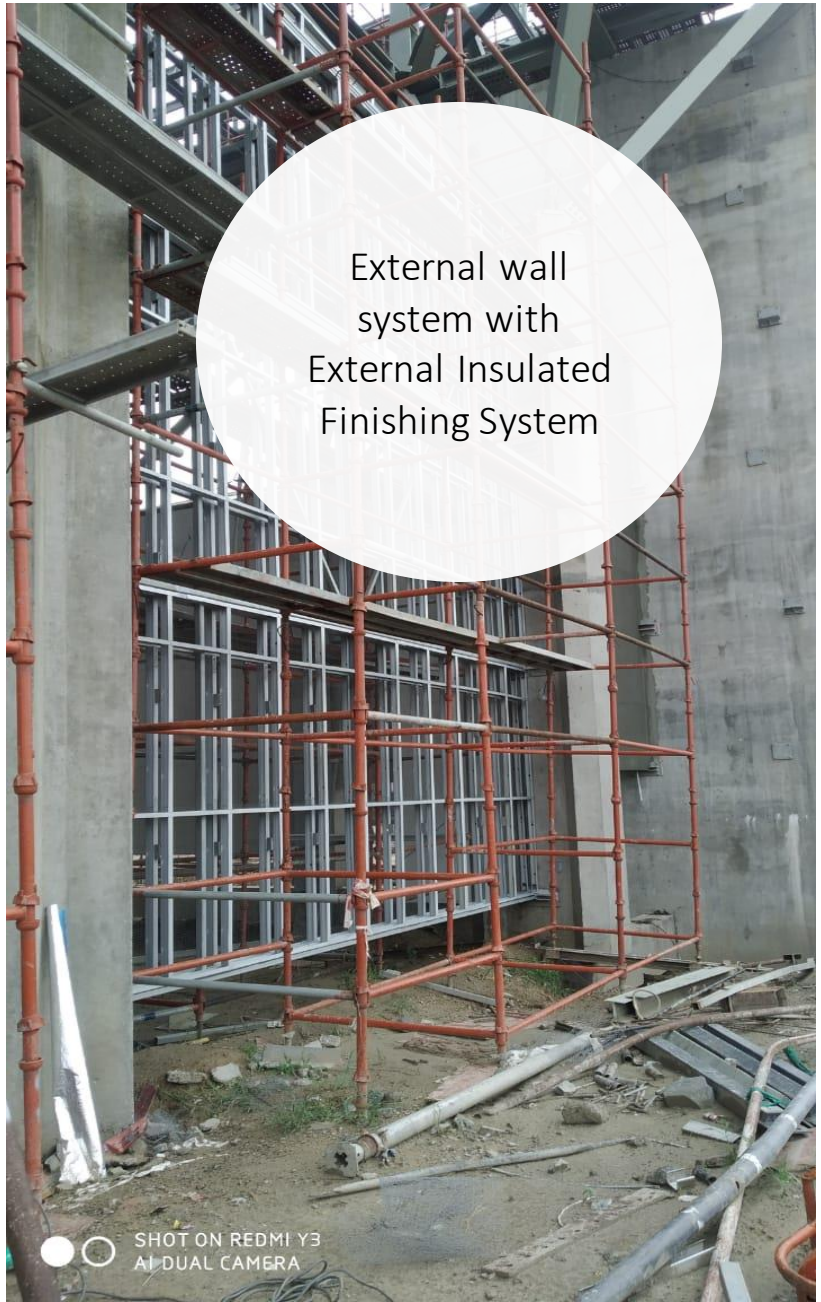


Acrylic modified texture finishing render final coat

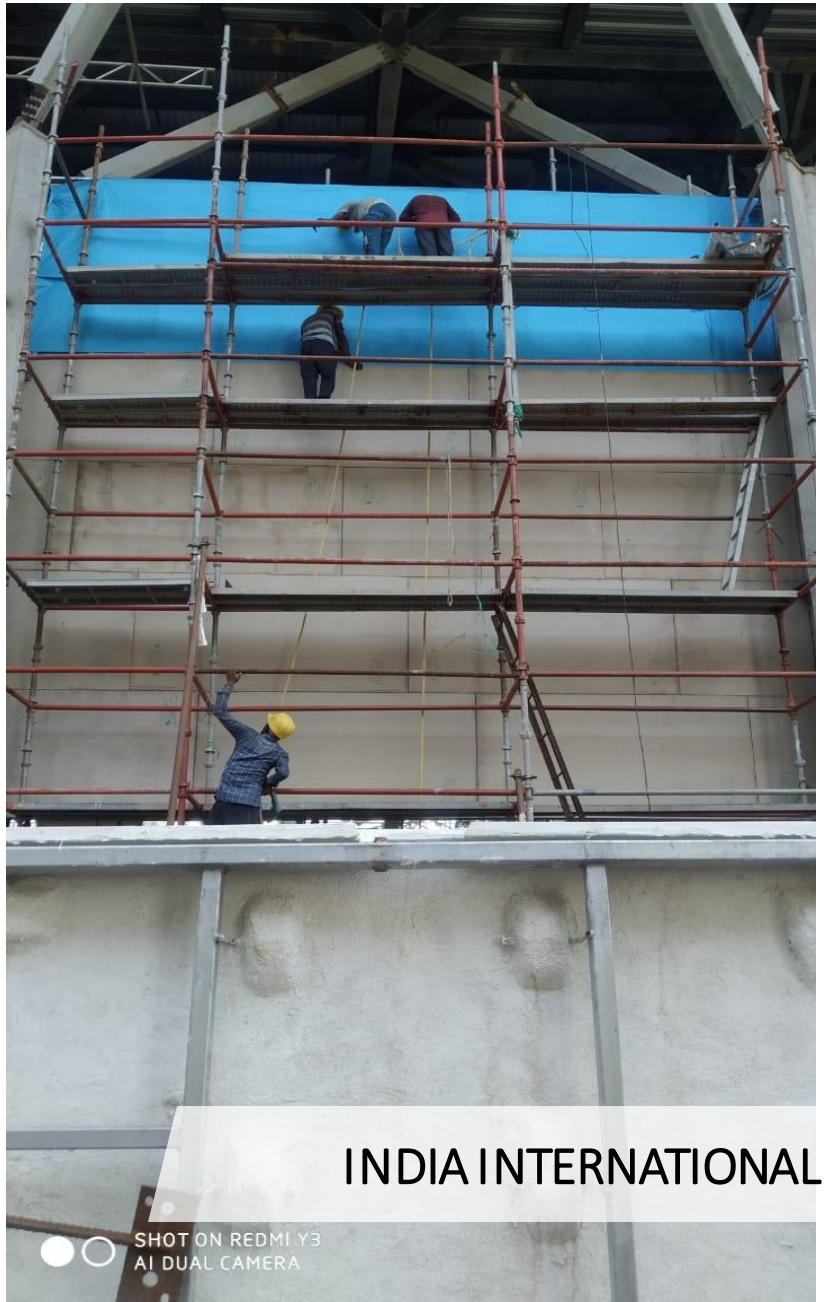
OPTION - 2

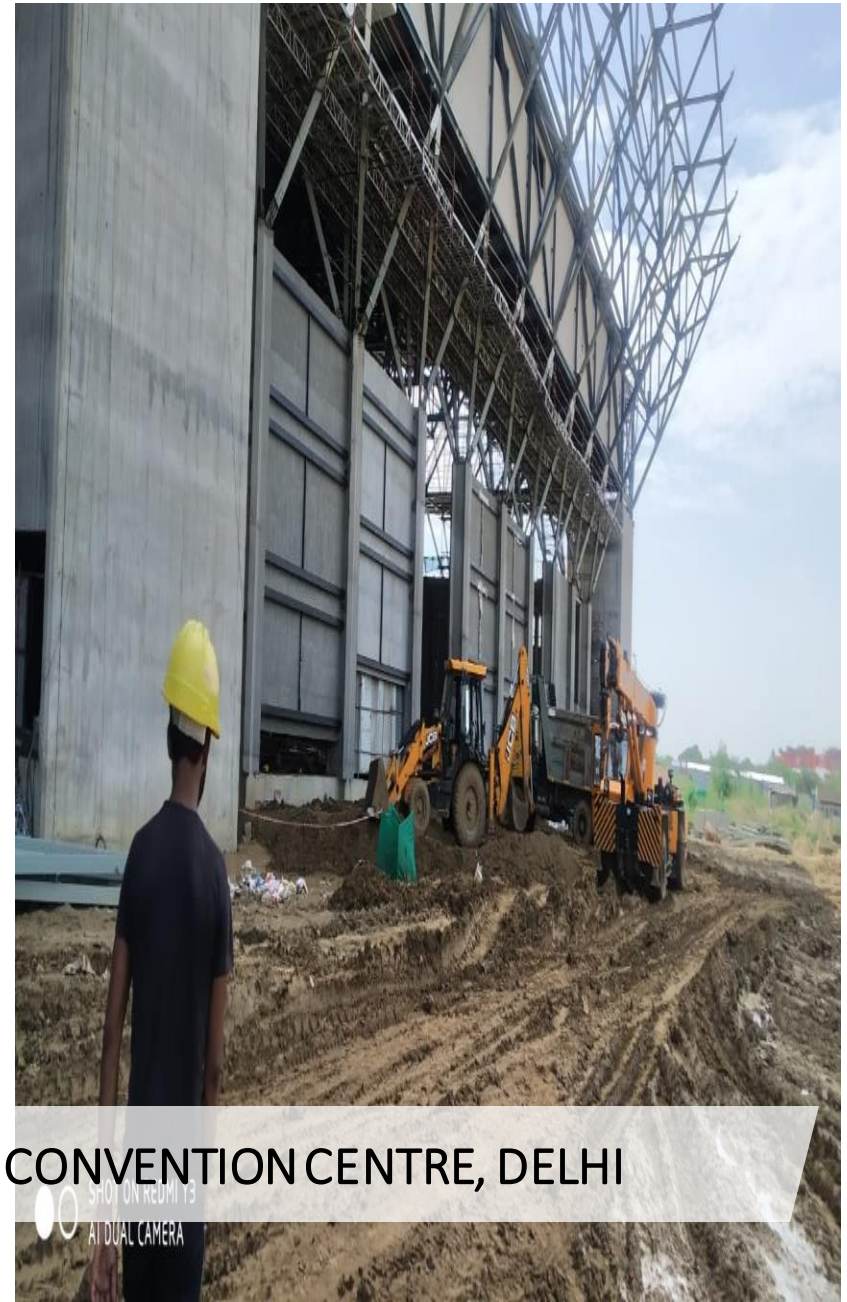
External Insulated Finishing system

everest



External wall system with External Insulated Finishing System





INDIA INTERNATIONAL CONVENTION CENTRE, DELHI

U VALUE CALCULATOR (WALL) – India International Convention Centre, Dwarka

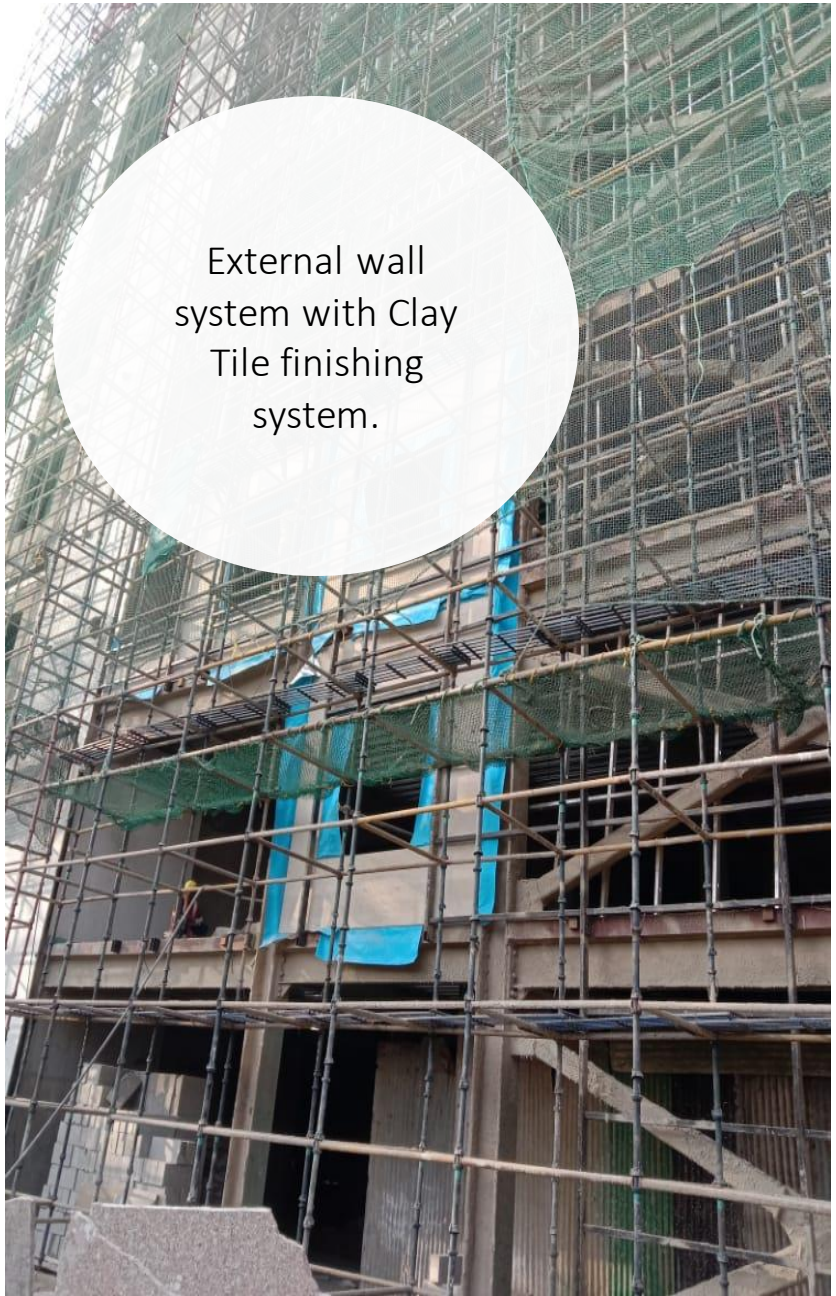
ELEMENT	Material	Width(d) [m]	Cumulative Width (d)	k [W/mk]	μ	μ.d [m]	R [m²K/W]		T[°C] Inner Bdry	T[°C] Outer Bdry	Dew point [°C]
Inside Air							0.1300	0.7646	25.0		13.9
Vapor Barrier/Paint etc	None	0	0	0		0	0.0000	0.0000	25.8	25.8	13.9
Inner render/plaster	Fiber Cement Board	0.024	0.024	0.14	50	1.2	0.1714	1.0082	25.8	26.8	24.0
Inner insulation	Rockwool / Glasswool	0.05	0.074	0.04	1	0.05	1.2500	7.3515	26.8	34.1	24.4
Additional Insulation	Unventilated Air Gap	0.144	0.218	5.67	0	0	0.1800	1.0586	34.1	35.2	24.4
wall structure	Fiber Cement Board	0.012	0.23	0.14	50	0.6	0.0857	0.5041	34.1	34.6	27.9
Adhesive Layer	Polymeric Cement plaster	0.003	0.233	0.72	150	0.45	0.0042	0.0245	35.2	35.2	27.1
Exterior insulation	EPS 20Kgs/m3 Cut Sheet	0.052	0.285	0.034	60	3.12	1.5294	8.9948	34.6	43.6	40.1
Exterior render	Polymeric Cement plaster	0.005	0.29	0.72	35	0.175	0.0069	0.0408	43.6	43.7	40.6
Vapor Barrier/Paint etc	None	0	0.29	0		0	0.0000	0.0000	43.7	43.7	40.6
Outside Air			0.29				0.0430	0.2529	43.7	43.9	41.9
						5.595	3.4007	20.0000			

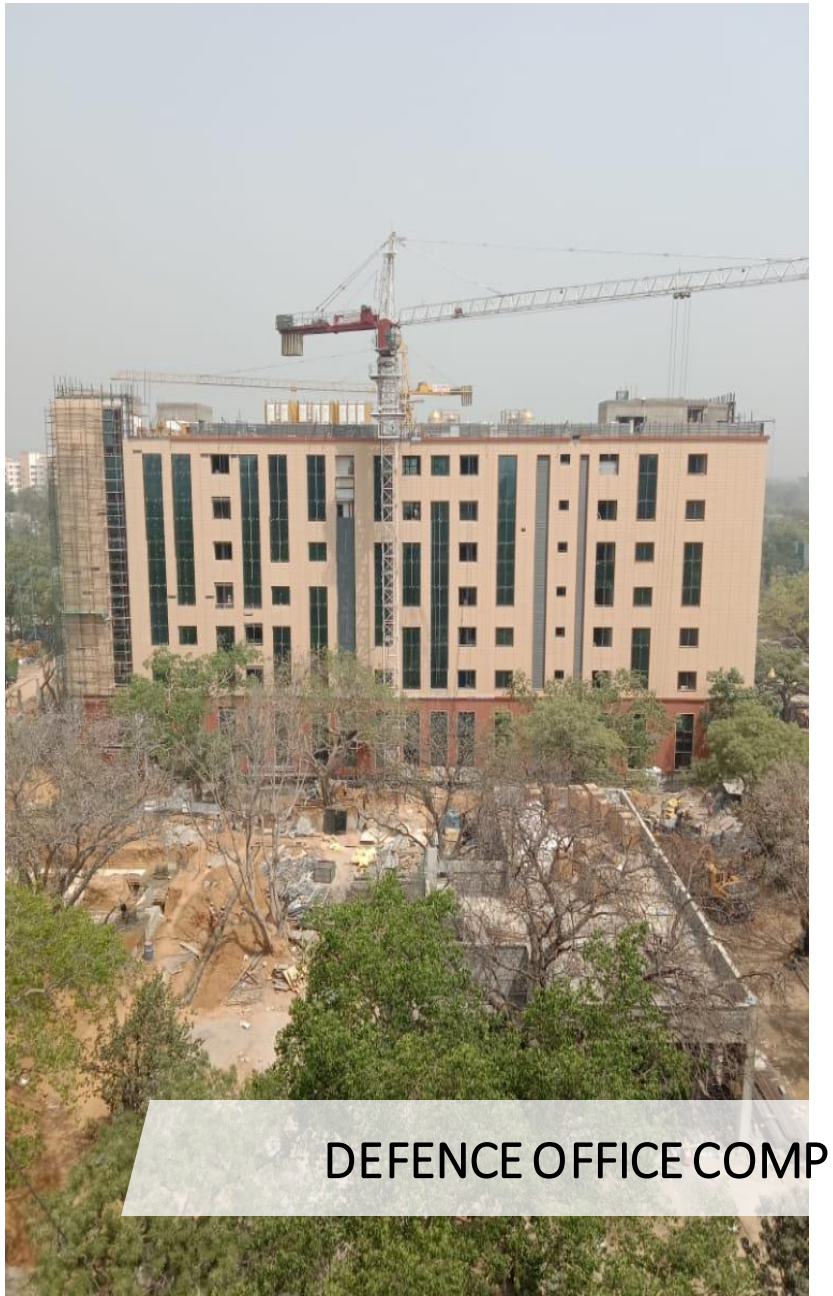
					U-VALUE	0.294	POWER COST (Rs./KWHR)	7.50
Temperature inside	25	Humidity Inside		50.00%	R-VALUE (SI)	3.40	HEAT VALUE REMOVED BY AC (MJ/KWHR)	3.60
Temperature outside	45	Humidity Outside		90.00%	R-VALUE (US)	19.32	EFFICIENCY OF AC IN REMOVING HEAT	80%
ANNUAL SAVINGS -ENERGY COSTS/sq m (WITH INSULATION)		₹1,331	ANNUAL -AC ENERGY COSTS/sq m (ENERGY LOST THROUGH WALLS WITH OUT INSULATION BY CONDUCTION)			₹1,530	DEGREE DAYS (AVG. TEMP DIFF. X NO. OF DAYS)	3000
							AVG. TEMP DIFF. (TEMP OUT - TEMP IN))	20
86.4 X ΔU X (ΔT X DAYS) X ENERGY COSTS / 1000X EFFICIENCY X HEAT VALUE						87.02%	DAYS/YEAR OF AC RUN	150

	Area	U Value (W/m ^{0}K)
Thermal Bridging	14.32%	0.51
Wall	85.68%	0.29
Effective U Value		0.32

EFFECTIVE U-Value: 0.32 W/m2K

Annual Savings – Energy Cost / sqm = Rs. 1331 / Sqm





DEFENCE OFFICE COMPLEX, DELHI (CENTRAL VISTA)

U VALUE CALCULATOR (WALL) – Defence office complex, Delhi

ELEMENT	Material	Width(d) [m]	Cumulative Width (d)	k [W/mk]	μ	μ.d [m]	R [m²K/W]	Delta T	T[°C] Inner Bdry	T[°C] Outer Bdry	Dew point [°C]
Inside Air							0.1300	0.8349	25.0		13.9
Vapor Barrier/Paint etc	None	0	0	0		0	0.0000	0.0000	25.8	25.8	13.9
Inner render/plaster	Fiber Cement Board	0.024	0.024	0.14	50	1.2	0.1714	1.1009	25.8	26.9	32.6
Inner insulation	Rockwool / Glasswool	0.1	0.124	0.04	1	0.1	2.5000	16.0549	26.9	43.0	33.6
Additional Insulation	Unventilated Air Gap	0.144	0.268	5.67	0	0	0.1800	1.1560	43.0	44.1	33.6
wall structure	Fiber Cement Board	0.012	0.28	0.14	50	0.6	0.0857	0.5505	43.0	43.5	38.6
Adhesive Layer	Polymeric Cement plaster	0.003	0.283	0.72	150	0.45	0.0042	0.0268	44.1	44.2	37.5
Exterior insulation	EPS 20Kgs/m3 Cut Sheet	0	0.283	0.034	60	0	0.0000	0.0000	43.5	43.5	38.6
Exterior render	Polymeric Cement plaster	0	0.283	0.72	35	0	0.0000	0.0000	43.5	43.5	38.6
Vapor Barrier/Paint etc	None	0	0.283	0		0	0.0000	0.0000	43.5	43.5	38.6
Outside Air			0.283				0.0430	0.2761	43.5	43.8	41.8
						2.35	3.1143	20.0000			

				U-VALUE	0.321	POWER COST (Rs./KWHR)	7.50
Temperature inside	25	Humidity Inside		50.00%	R-VALUE (SI) 3.11	HEAT VALUE REMOVED BY AC (MJ/KWHR)	3.60
Temperature outside	45	Humidity Outside		90.00%	R-VALUE (US) 17.70	EFFICIENCY OF AC IN REMOVING HEAT	80%
ANNUAL SAVINGS -ENERGY COSTS/sq m (WITH INSULATION)		₹1,337	ANNUAL -AC ENERGY COSTS/sq m (ENERGY LOST THROUGH WALLS WITH OUT INSULATION BY CONDUCTION)		₹1,554	DEGREE DAYS (AVG. TEMP DIFF. X NO. OF DAYS)	3000
86.4 X ΔU X (ΔT X DAYS) X ENERGY COSTS						AVG. TEMP DIFF. (TEMP OUT - TEMP IN))	20
1000X EFFICIENCY X HEAT VALUE					86.05%	DAYS/YEAR OF AC RUN	150

	Area	U Value (W/m ^{0}K)
Thermal Bridging	14.32%	0.51
Wall	85.68%	0.32
Effective U Value		0.35

EFFECTIVE U-Value: 0.35 W/m2K
Annual Savings – Energy Cost / sqm = Rs. 1337 / Sqm

* Contribution from clay tile cladding not considered

External wall system with watertight finishing system.

ADANI CONNEX DATA CENTRE, CHENNAI

U VALUE CALCULATOR (WALL) – Adani Connex Data Centre, Chennai

ELEMENT	Material	Width(d) [m]	Cumulative Width (d)	k [W/mk]	μ	μ.d [m]	R [m²K/W]	Delta T	T[°C] Inner Bdry	T[°C] Outer Bdry	Dew point [°C]
Inside Air							0.1300	0.8349	25.0		13.9
Vapor Barrier/Paint etc	None	0	0	0		0	0.0000	0.0000	25.8	25.8	13.9
Inner render/plaster	Fiber Cement Board	0.024	0.024	0.14	50	1.2	0.1714	1.1009	25.8	26.9	32.6
Inner insulation	Rockw ool / Glassw ool	0.1	0.124	0.04	1	0.1	2.5000	16.0549	26.9	43.0	33.6
Additional Insulation	Unventilated Air Gap	0.144	0.268	5.67	0	0	0.1800	1.1560	43.0	44.1	33.6
wall structure	Fiber Cement Board	0.012	0.28	0.14	50	0.6	0.0857	0.5505	43.0	43.5	38.6
Adhesive Layer	Polymeric Cement plaster	0.003	0.283	0.72	150	0.45	0.0042	0.0268	44.1	44.2	37.5
Exterior insulation	EPS 20Kgs/m3 Cut Sheet	0	0.283	0.034	60	0	0.0000	0.0000	43.5	43.5	38.6
Exterior render	Polymeric Cement plaster	0	0.283	0.72	35	0	0.0000	0.0000	43.5	43.5	38.6
Vapor Barrier/Paint etc	None	0	0.283	0		0	0.0000	0.0000	43.5	43.5	38.6
Outside Air			0.283				0.0430	0.2761	43.5	43.8	41.8
						2.35	3.1143	20.0000			
					U-VALUE		0.321	POWER COST (Rs./KWHR)		7.50	
Temperature inside	25	Humidity Inside		50.00%	R-VALUE (SI)		3.11	HEAT VALUE REMOVED BY AC (MJ/KWHR)		3.60	
Temperature outside	45	Humidity Outside		90.00%	R-VALUE (US)		17.70	EFFICIENCY OF AC IN REMOVING HEAT		80%	
ANNUAL SAVINGS -ENERGY COSTS/sq m (WITH INSULATION)		₹1,337	ANNUAL -AC ENERGY COSTS/sq m (ENERGY LOST THROUGH WALLS WITH OUT INSULATION BY CONDUCTION)				₹1,554	DEGREE DAYS (AVG. TEMP DIFF. X NO. OF DAYS)		3000	
86.4 X ΔU X (ΔT X DAYS) X ENERGY COSTS / 1000X EFFICIENCY X HEAT VALUE								AVG. TEMP DIFF. (TEMP OUT - TEMP IN))		20	
							86.05%	DAYS/YEAR OF AC RUN		150	

	Area	U Value (W/m ⁰K)
Thermal Bridging	14.32%	0.51
Wall	85.68%	0.32
Effective U Value		0.35

EFFECTIVE U-Value: 0.35 W/m2K

Annual Savings – Energy Cost / sqm = Rs. 1337 / Sqm

Healthcare facility can improve its efficiency and sustainable performance by implementing:

- Reduce waste generation and reinvent waste management
- Redesign transportation systems to be more eco-friendly.
- Conserve water
- Improve energy efficiency

Everest highly insulating external & internal walls aid in drastic reduction of Building energy demand

SUSTAINABILITY IS NO LONGER ABOUT DOING LESS HARM

IT'S ABOUT DOING MORE GOOD