

## **ABOUT US**

Horizons Industrial Development Co. L.L.C. (HIDC) with exclusive manufacturing rights of the Glass Fiber Reinforced Gypsum Panels commercially known as Rapidwall<sup>®</sup>.

Rapidwall® Building Systems by Horizons Industrial Development Co LLC is a new age solution to current day construction constraints like shortage of manpower, excess usage of water, spiraling cost of steel, cement. Rapidwall®, is an energy efficient green building material with huge potential for use as load bearing wall. In the last 12 years in Oman market, Rapidwall® panels has been successfully used to build Villas, Office buildings, Commercial buildings, Industrial warehouses and boundary walls. In current competitive market, investors can bring their projects to the market almost 50% ahead of target date at a reduced cost.

#### **OUR HISTORY**

Horizon Industrial Development Company L.L.C. (HIDC) is a grade One Oman based company, established in 2008. Our product Rapidwall is fully manufactured in Oman and proudly an Omani product. The production facility based in Sohar industrial Area Phase-3. Our high guality and reliable Production, as well as 12 years of experience in Oman market makes us as unique partner. We are trusted by leading developers in middle east.

## **OUR VALUES**





Omanization

Professionalism & Quality

Beneficial & Happy Partnership with client

Staff

Social Responsibility

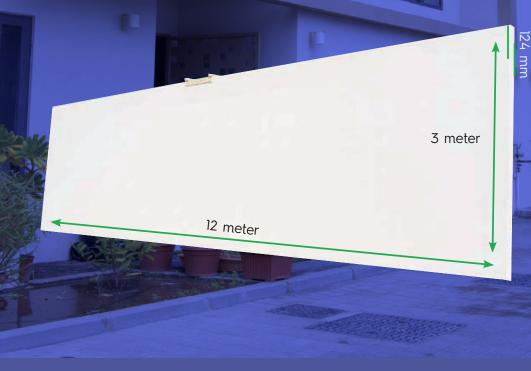


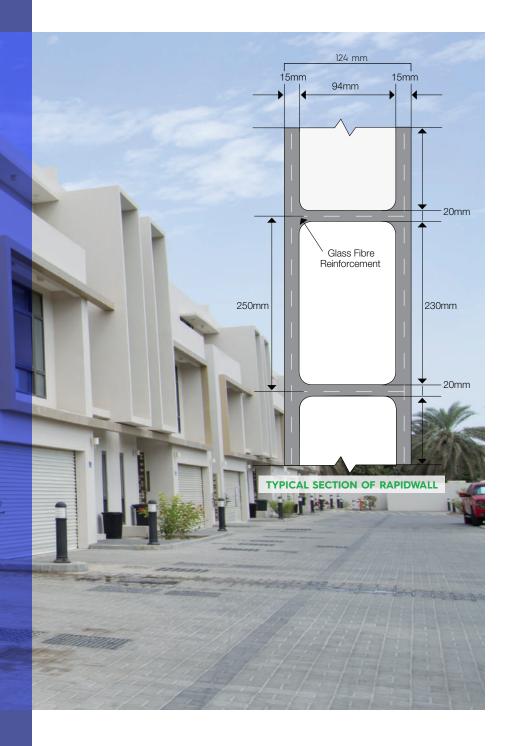
# SUPERIOR BUILDING

Rapidwall<sup>®</sup> is a revolutionary, low cost pre-fabricated, load bearing walling product suitable for use in high-rise residential, commercial and industrial building construction.

Rapidwall<sup>®</sup> is manufactured in an automated moulding process, using glass fiber reinforced, water resistant gypsum plaster. After removal from the casting table the flat, single sized, panels are air dried. The technically advanced manufacturing process provides a durable walling product with structural properties that makes Rapidwall<sup>®</sup> panels load-bearing & well suited for use in earthquake-prone areas.

All panels are 12mtr long and 124mm thick and can be produced in heights of 3mtr. Construction using the precise Rapidwall<sup>®</sup> panels is very fast, low cost and eliminates the need for brick, blocks, wall framing and wall-board. Rapidwall<sup>®</sup> can be used as floor / roof slab.





## LOAD - BEARING

Radipwall<sup>®</sup> is lightweight, (only 40kg/m2 or approximately 12% of the weight of a concrete or brick wall) and is stronger than conventional materials. Furthermore, it is load-bearing and can be used for external & internal walls as well as for roofs or floors in combination with reinforced concrete cavities. Rapidwall<sup>®</sup> is a system that has been proven in exhaustive scientific testing to withstand considerable loads and is therefore ideal in earthquake prone areas; can be constructed to withstand high winds, such as cyclones and hurricanes; uses natural gypsum and is recyclable; can be used in load-bearing buildings of up to 15 storeys is ideal for repetitive design construction and can be erected in a fraction of the time of other building methods.

## RAPIDWALL® FOR AFFORDABLE QUALITY CONSTRUCTION

Rapidwall<sup>®</sup> Panel provides a new method of building construction in fast track, Fully utilizing the benefits of prefabricated, light weight large panels with modular cavities and time tested conventional cast-in-situ constructional use of concrete and steel reinforcement. By this process, man power, cost and time of construction is reduced. Conventional construction involves various cumbersome and time consuming processes. In contract, Rapidwall<sup>®</sup> construction is much faster and easier. There will be no debris left at site. Rapidwall<sup>®</sup> enables load-bearing wall by wall construction. Rapidwall<sup>®</sup> also does not require framed structure construction and wall plastering, as Rapidwall<sup>®</sup> both surfaces are smooth and ready to receive paint.

## RAPIDWALL® BUILDING / HOUSING IS COOLER

A comparative research study, found that in summer indoor temperature of Rapidwall<sup>®</sup> building is cooler by 2 to 5 degrees Celsius as compared to concrete building. The high thermal resistance of Rapidwall<sup>®</sup> will keep interiors cooler in summer and warmer in winter, saving substantial recurring energy use.

## SUPERIOR FINISH

The finish of Rapidwall<sup>®</sup> is smoother and flatter than equivalent pre-cast concrete, in-situ concrete or masonry walls. Rapidwall<sup>®</sup> provides the ideal green structural walling material for contemporary architectural designs. Rapidwall<sup>®</sup> panels can be finished in a range of decorative texture finishes and can include bands, quoins and rendered finishing.





#### EARTHQUAKE RESISTANT

When used as load-bearing shear walls Rapidwall<sup>®</sup> exhibits superior ductile qualities that makes it safer and effectively stronger than reinforced masonry. Its mechanical properties make Rapidwall<sup>®</sup>a superior earthquake resistant structural walling product for both vertical and lateral loads.

## WATER & FIRE RESISTANT

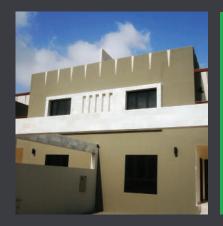
Rapidwall<sup>®</sup> provides essential protection against fire and water. Rapidwall<sup>®</sup> buildings will have two, four hour fire resistance once filled with insulation and concrete respectively. Rapidwall<sup>®</sup> panels are manufactured with water repellent additives which makes the product as water resistant. Rapidwall<sup>®</sup> panels absorb water Less than 5% of its weight when completely immersed in water for 48 hours.



#### LIGHT WEIGHT & ACCURATE

Compared to other building materails each lightweight Rapidwall<sup>®</sup> panel can be easily installed with a small crane (maximum lift 1.5 tonnes) and because of the reduced weight, savings can also be made on the cost of foundations. A similar (12mtrx3mtrx124mm) concrete wall panel weights over 10t in comparison with Rapidwall<sup>®</sup> which weigh only 1.5t.A normal truck can transport upto 450m<sup>2</sup> Rapidwall<sup>®</sup> panels compared to 125m<sup>2</sup> of Precast concrete blocks.



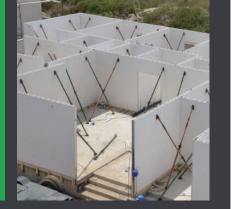


#### **ECONOMICAL**

Rapidwall<sup>®</sup> has an installed cost considerably lower than that of an equivalent standard precast concrete wall. Rapidwall<sup>®</sup> costs less than equivalent masonry walling over which it also enjoys an up to 10% spacesaving. Because Rapidwall<sup>®</sup> is quicker and easier to erect, projects are finished faster and development funds are tied up for shorter periods. Rapidwall<sup>®</sup> can eliminate the need for bricks, timber walls, rames and plaster board linings.

## ACCOMMODATE BUILDING SERVICES

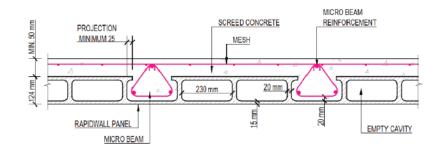
The cellular panels can be used to accommodate building services such as plumbing & electrical conduits. They can be left empty or filled with insulation for increased thermal performance or they can be filled with structural grade concrete for increased axial strength. All MEP lines are concealed in cavities will avoid chipping and repair. MEP works done at site makes better design flexibility for the designer & the end user.

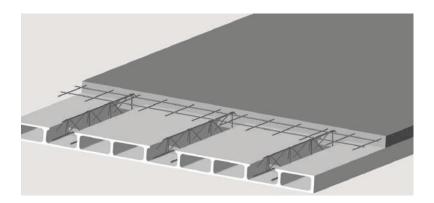


## RAPIDWALL® FOR FLOOR / ROOF SLAB

Rapidwall<sup>®</sup> used for floor / roof slab with embedded micro beams. Rapidwall<sup>®</sup> slab act as one way slab, concrete is done on the top of the Rapidwall as screed. The screed thickness may varies from 8cm to 12cm as per the structural design.

Rapidwall\* slab will give better thermal insulation than the conventional slab. Overall slab thickness varies from 20cm to 25cm.





## TECHNICAL PROPERTIES

Shear Strength (SS) of vertical Rapidwall® panels			
Description	Shear Strength φR (KN/M)		
Unfilled Rapidwall® Panel	21.6		
Rapidwall® Panel Filled with 25MPa Concrete	61		

Sound Transmission Class (STC) values of various forms of Rapidwall® construction			
Description	STC		
Single leaf Rapidwall® unfilled	28		
Single leaf concrete-filled Rapidwall®	45		

Thermal Resistance (TR) values of various forms of Rapidwall® construction				
Description	R (m²K/W)			
Single leaf Rapidwall® unfilled	0.36			
Single leaf Rapidwall* filled with 20MPa normal concrete	0.25			
Single leaf Rapidwall* filled with light weight concrete	0.6			

## MECHANICAL PROPERTIES

The table below provides the various mechanical properties of Rapidwall® panels when used empty and when concrete filled.

Description	Property	Value	Note	
Unfilled Rapidwall® Panel	Uni-axial compressive strength	160 KN/M		
	Uni-axial tensile strength	34-37 KN/M	As per design manual Strength obtained from longitudinal compression/ tension tests with ribs vertical	
	Out-of-plane flexural rigidity EI, rib parallel to span	3.5 x10 <sup>n</sup> Nmm²/m		
	Out-of-plane flexural rigidity El, rib perpendicular to span	1.7x10 <sup>11</sup> Nmm²/m		
	Unit weight	40kg/m²		
	Thermal expansion coefficient	12x10 <sup>-6</sup> mm/mm/*c		
	Water absorption	<5%	Water absorption by	
	Mohr hardness	1.6	weight % after 24hours of immersio	
Rapidwall® panels filed with 20 MPa concrete in all the cores	Uni-axial compressive strength	1360 KN/M	Obtained from longitudinal compression tests with ribs in the longitudinal direction	

## APPLICATIONS OF RAPIDWALL®







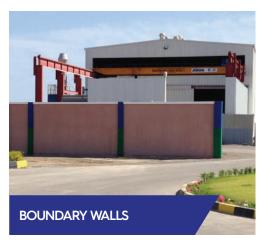














FIRE RATED WALLS



INDUSTRIAL BUILDINGS



Rapidwall® is manufactured off site in a Rapidwall® production unit. HIDC's manufacturing facility are strategically located in Madayn Sohar Phase - 3 Sultanate of Oman.

Rapidwall<sup>®</sup> plant consist of automated production plant, drying area & computer controlled cutting machine.

The Rapidwall<sup>®</sup> System streamlines the construction process by transferring the majority of on-site work to the Rapidwall<sup>®</sup> factory.

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It is within the factory that the large single spanning walls, roofs manufacturing tables would are produced. These building components are then easily erected on site in a matter of hours rather than weeks.

Rapidwall® plant with three produce approximately 700,000m2 of panel per annum, 2,376m2 a day, based on a 24 hour production schedule over 300 days. This equates to more than 2000 houses of 120m<sup>2</sup> each including rapidwall roofs.

A full size Rapidwall® panel large enough size to form an entire wall of a building structure. It is cut easily either at the factory or site and can be tailored to a great variety of designs, including window and door requirements.

HIDC have been operating, testing & perfecting Sohar plant for the manufacture of Rapidwall<sup>®</sup> since 2008.

## INTEGRATED RESIDENTIAL PROJECTS



TAWIZAIN HAIL Client City Home

13.000 SQ M

Total Built Up Area

**Consultancy** Rayan International Design LLC

Project Status Completed 2016



HAI AL NASEEM - BARKA (1000 VILLAS) Client Consultant Adrak Developers LLC Insight Engi

**Total Built Up Area** 135,500 SQ M Consultancy Insight Engineering Consultant

Project Status On-going



RAS AL HAMRA PHASE 2C Consultancy Petroleum Development Oman

Consultancy NJP & EIDC

**Total Built Up Area** 30,000 SQ M **Project Status** On-going



TOURIST RESORT SAWADI Client The Blue City Real Estate

**Total Built Up Area** 50,000 SQ M **Consultancy** Dar Al Imarah

Project Status Completed 2018



DAR AL ZAIN - PHASE - 5 Client Abjar Trading and Contracting

**Total Built Up Area** 10,100 SQ M **Consultancy** D&A - Architect Interiors

Project Status Completed 2017



DAR AL ZAIN - PHASE - 6 Client Abjar Trading & Cont. Co. LLC

**Total Built Up Area** 29,000 SQ M Consultancy Rayan International Design LLC

Project Status Completed 2017

# INSTITUTIONS



#### IBRA TECHNICAL COLLEGE Client IBRA Technical College

**Total Built Up Area** 2,088 SQ M **Consultancy** 3D-Engineering Consultants

Project Status Completed 2013



MUSANNAH COLLEGE Client Ministry of Man Power

**Total Built Up Area** 4,185 SQ M **Consultancy** Al Saqf Engineering Consultancy

Project Status Completed 2015



#### DUQM INTERNATIONAL SCHOOL Client Co

Al Tamman Holding LLC (Muscut Overseas Group)

**Total Built Up Area** 8,510 SQ M Consultancy

CPEC Centerpoint Architectural and Engineering Consultancy

Project Status Completed 2019

## ACCOMODATION



#### MAZOON DAIRY Client

Mazoon Dairy (Main works for Phasel)

**Total Built Up Area** 20,150 SQ M Consultancy AECOM Middle East Consultant Eng'g Insight Engineering Consultants

Project Status Completed 2018



JINAN RESIDENCY, SALALAH Client

Gulf Developers Co.LLC

**Total Built Up Area** 62,750 SQ M Consultancy Al SAQF engineering Consultancy

Project Status Completed 2012



#### FEMALE STUDENTS ACCOMODATION FOR ASU - IBRA

Client Al Aqtab Trading and Contracting **Consultancy** Artistry Engineering Consultancy

**Total Built Up Area** 18,350 SQ M Project Status Completed 2013

## OFFICE BUILDING / INDUSTRIAL OFFICES



**OFFICE BUILDING - SAUDI** Client RBC

650 SQ M

Total Built Up Area

Consultancy RBC **Project Status** 

Completed 2012



ORPIC TEMPORARY OFFICE BUILDING Client Consultancy HIDC Orpic

Total Built Up Area 3,530 SQ M

**Project Status** 

Completed 2016



OFFICE BUILDING AT SOHAR Consultancy Arabian Industries

Total Built Up Area 1,100 SQ M

Client

AI SAQF Engineering Consultancy

**Project Status** Completed 2012

## COMMERCIAL ESTABLISHMENTS & MALLS



#### **CHINA MALL**

Client Mr. Hasan Al Hashim

**Total Built Up Area** 16,200 SQ M

Consultancy Al Qarshobi Engineering

**Project Status** Completed 2015



#### **GIFTS ISLAND** Client

Ali Khamis Mubarak Alawi

**Total Built Up Area** 22.500 SQ M

Consultancy Masar Engineering Consultancy

**Project Status** Completed 2017



**BARKA GATE MALL** Client

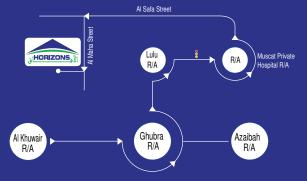
Saif Ali Mohammad Al Salhi

**Total Built Up Area** 22.500 SQ M

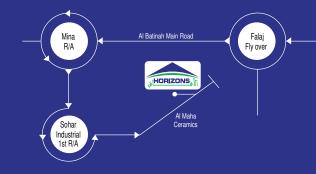
Consultancy Al Manarah Engineering Consultancy

**Project Status** Completed 2015





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