

# DUROCK<sup>®</sup> CEMENT BOARD



EXTERIOR DRYWALL SOLUTIONS

**USG BORAL**   
INNOVATION INSPIRED BY YOU.™

[USGBoral.com](https://www.usgboral.com)

Plasterboards

Ceilings

Compounds

Metal Framing

Substrates

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# INTRODUCTION

DUROCK® Cement Boards forms an exterior drywall system that is a superior solution to traditional construction methods like brick walls or autoclaved-aeriated concrete (AAC) blocks. Being lightweight and versatile, the extremely durable DUROCK® exterior drywall allows faster speed of construction for residential or commercial buildings.

This proprietary exterior wall system combines the use of a specially designed steel framing structure\* with high quality DUROCK® cement boards on the exterior side and plasterboard on the internal side.

\*Refer to USG Boral Exterior Metal Framing System.

# FEATURES



### High Strength

High flexural strength helps resist cracking. High indentation strength to resist impact damage.



### Fast and Easy Installation

Easy to cut and fasten. Dry panel application eliminates cement mixing and drying time.



### Dimensional Stability

Low thermal and hydrometric movement helps resist cracking.



### Versatility

Unlimited designs with numerous finishing options to suit architects imaginations.



### Water Durable

Humidity & moisture resistant. Will not swell, soften, decay, delaminate or disintegrate in water.



### Mold and Mildew Resistant

Resistant to mold and mildew.

Scores a 10 out of 10 as per ASTM D3270 standard for resistance to mold growth.



### Light Weight

Board weight is 13.25 kg/m².



### Dual Surface

Rough surface enhances bonding. Reduces tile slip with mortar applications.

# BENEFITS

Versatility on exterior wall design and finishing.

x10

Up to 10 times light weight exterior wall structure.

x6

Up to 6 times faster in exterior wall construction.

x10

Up to 10 times low U-value (better thermal insulation performance).

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Much lower maintenance cost from wall crack and water penetration issues.

+20Y

Proven exterior drywall solution over 20 years (durability).

Flexible system performance design (fire, acoustic and thermal).

# DUROCK® EXTERIOR DRYWALL VS CONVENTIONAL SYSTEM

	Durock® Exterior Drywall	Conventional System (Brick Wall)
<b>Material Source</b>	USG Boral	Diffrent sources (different qualities).
<b>Construction Techniques</b>	Dry construction.	Wet constructions.
<b>Design Flexibility</b>	Bending radius of 2.44 meters.	Curves can be achieved manually. Work quality highly depending on labor's skill.
<b>Speed</b>	Building envelope work can be started as soon as upper floor slab structure is done. This leads faster completion of works resulting in early rental income or revenue generation.	Speed interior work can only begin when the wet consturction is over.
<b>Energy Saving</b>	DUROCK® Exterior Drywall system configuration with air gap and insulation lowers energy cost and carbon footprint.	High heat transmission factor in conventional brick wall leading to excessive energy bills.
<b>Slim Wall</b>	Flexible wall thickness. More space in interior side.	Wall thickness fixed by brick size. Less space interior side.
<b>Weight</b>	DUROCK® wall is approximately 30 to 40kg/m <sup>2</sup> .	Approximately 300-350 kg/m <sup>2</sup> .
<b>Acoustic</b>	System EW.2C (~150mm thick) can be engineered to achieve STC 52 with insulation. Ideal for residential, hospitals, hospitality, education centers or buildings facing noisy traffic.	152mm thick hollow block wall (1522 kg/m <sup>3</sup> ) can offer an STC rating of 43*.
<b>Fire Resistance</b>	DUROCK® Exterior Drywall systems can be engineered to achieve up to 2 hr fire rating performance according to BS 476 : Part 22 and ASTM E119.	No certified data.
<b>Selsmic Resistance</b>	Ideal for earthquake prone zones & high rise buildings due to low dead weight. Ductile system can take large deformations with less potential for damage in case of failure.	Due to heavy weight and no mechanical fixing, it can't take large deformation, which can lead to early failure.
<b>Refurbishment</b>	Face lifting, change in elevation of existing structures can be done without any major structural changes. Can add extra floors. Acoustic & fire performances of existing building envelopes easily enhanced.	Additional reinforced concrete is required to undergo change in elevation etc.

**References:**

\*National Concrete Masonry Association : TEK 13-1C, Sound Transmission Class Ratings for Concrete Masonry Walls, 2012.

# DUROCK® CEMENT BOARD SPECIFICATIONS



- Aggregated Portland cement board with polymer-coated, scrim mesh embedded in back and front surfaces.
- Ends are square cut and edges are reinforced and finished smooth.
- The long edges of panels are tapered, allowing joints to be reinforced and concealed with DUROCK® joint treatment systems.
- Rough exterior face to facilitate adhesion of the Baseflex Compound.
- Easier to lift, carry and install.
- Moisture resistant and mold resistant.
- It will not suffer damage due to deterioration, warping, delaminating, or disintegrate when exposed to direct water contact for a long period of time.

	Data	Standard
<b>Flexural Strength</b>	≥52.7kg/cm <sup>2</sup> (750psi)	ASTM C-947-03
<b>Water Absorption (24hours)</b>	≥30% of its weight	ASTM C-1185-08
<b>Nail Pull Resistance</b>	≥555N (≥125lbf)	ASTM C-473-07
<b>Non-combustibility</b>	Non-combustible	ASTM E-136-04, BS 476-4
<b>Flame Spread Index</b>	Class A / Index 0	ASTM E-84-05, BS 476-6
<b>Smoke Developed Index</b>	Class A / Index 0	ASTM E-84-05, BS 476-7
<b>Thermal (R)</b>	0.05K.m <sup>2</sup> /W	ASTM C 518
<b>Freeze/Thaw Resistance (number of cycles with no deterioration)</b>	100	ASTM C-666-03
<b>Heat-Rain Performance (after 50 heat-rain cycles)</b>	Pass (no visible cracks, delamination, warping and bowing)	BS EN 12467:2012
<b>Mold Resistance</b>	10/10	ASTM D 3273
<b>Min Bending Radius</b>	2.44m (8')	

# DUROCK® CEMENT BOARD USES



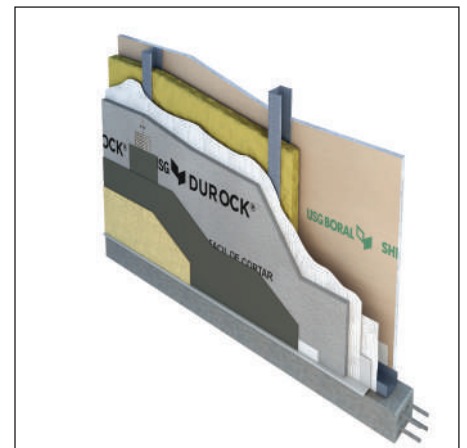
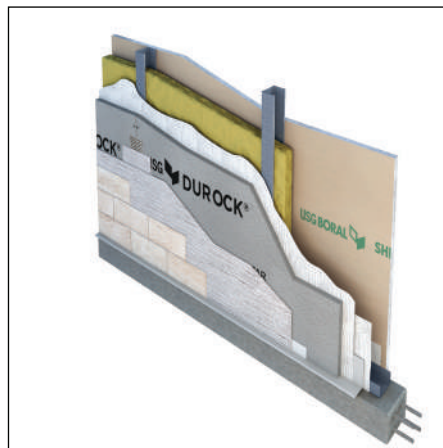
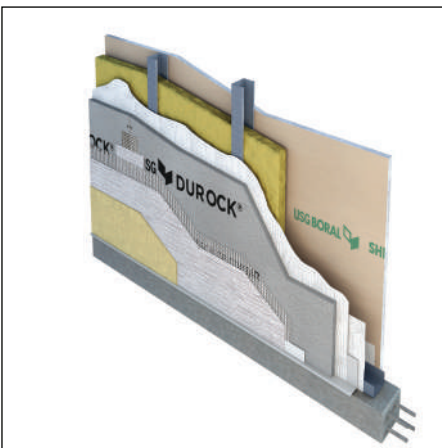
Durock can be used in the construction of:

- Exterior Walls
- Facades
- Exterior Ceilings
- Sporting Facilities
- Education Centre
- Chalets or Villas
- Pre-engineered Buildings (PEB)
- Prefabricated Prefinished Volumetric Construction (PPVC)
- Bathrooms
- Showers
- Kitchens
- Laundries
- Swimming Pools (interior ceiling)
- Saunas

## TYPE OF EXTERIOR APPLICATION



The construction of exterior walls with USG Boral's proprietary exterior framing systems can be done up to 6 times faster than traditional methods.



Durock® Cement Board is a non-combustible panel idea for use as a substrate for brick veneer, properly detailed Exterior Insulation Finish System (EIFS) and Direct-applied Exterior Finish System (DEFS), clapboard siding, panel siding, shingle siding, shake siding and conventional stucco.

# DUROCK® EXTERIOR PARTITION COMPONENTS



## DUROCK® CEMENT BOARD

DUROCK® Cement Board is an aggregated Portland cement board with polymer coated scrim mesh on front, back faces and edges.

**Dimension:** 12.7mm x 1220mm x 2440mm  
(12.7mm x 1200mm x 2400mm available upon request)

**Weight:** Approximately 13.25kg/m<sup>2</sup>

**Packaging:** 30 pcs/pallet



## DUROCK® JOINT TAPE

DUROCK® Joint Tape is made of polymerized fiberglass mesh. It embeds into Baseflex for joint treatment.

45m length x 100mm width per roll



## DUROCK® BASEFLEX

DUROCK® Baseflex is the recommended compound for joint treatment and can be used as a base coat for the for the entire surface before applying final exterior paint. It is also recommended as an adhesive for ceramic tiles.

**Packaging:** 22.7kg per bag

**Coverage:** For a layer of maximum 2 to 3mm thickness, 5 to 6m<sup>2</sup> per bag. For the tile (adhesive application using 1/4" adhesive spreader), 4m<sup>2</sup> per bag.



## TYVEK® WEATHER BARRIER

It is a weather resistant barrier for DUROCK® Exterior Drywall System.

1.53m wide and 61m long per roll



## USG BORAL EXTERIOR METAL FRAMING SYSTEM

Exterior metal framing system that is specially engineered according to international standards such as BS EN 1993-1-3, BS 5950-5 and AISI S100.

**Depth:** Well Studs 92mm, 125mm

**Two Thickness:** 0.90mm & 1.15mm



## TEK SCREW

### 12.7MM TEK SCREW

For affixing metal studs to LB-1 bracket or as specified.

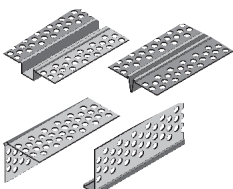
**Packaging:** 10,000 pcs/box



## DUROCK® SCREW

DUROCK® Screws in 32mm and 41mm with corrosion resistant Ruspert coating for securing DUROCK® Cement Board panels to metal framing of 0.9mm to 2mm.

**Packaging:** 5,000 pcs/box



## PVC BEADS

PVC Beads for DUROCK® Exterior Drywall System resist cement alkalinity conditions, weather, UV rays, and the various factors that external systems are exposed to. They come in lengths of 3.05m and are fixed to the system with screws that are hidden during the joint treatment process.

# REFERENCE JOBSITES WITH DUROCK® EXTERIOR DRYWALL SYSTEM



Plaza Universidad, Mexico. 2004



City Express Plus hotel, Monterrey Mexico. 2014



Residential Condo at Science Park, Monterrey Mexico. 2004



Tata Promont (Tata Housing) Bangalore India. 2016



Jet Airways Godrej BKC, Mumbai India. 2015



CCK Endau Kindergarten, Malaysia. 2017



Marina Bay Sands Hotel and Resort, Singapore. 2004

Australia  
China  
India  
Indonesia  
**Malaysia**  
Middle East  
New Zealand  
Thailand  
Philippines  
Singapore  
South Korea  
Vietnam

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