



BRUNEI CEMENT



Meets The Demand
of the people in
Brunei Darussalam

Cement Testing Process



Sample
Collection



Chemical
Analysis



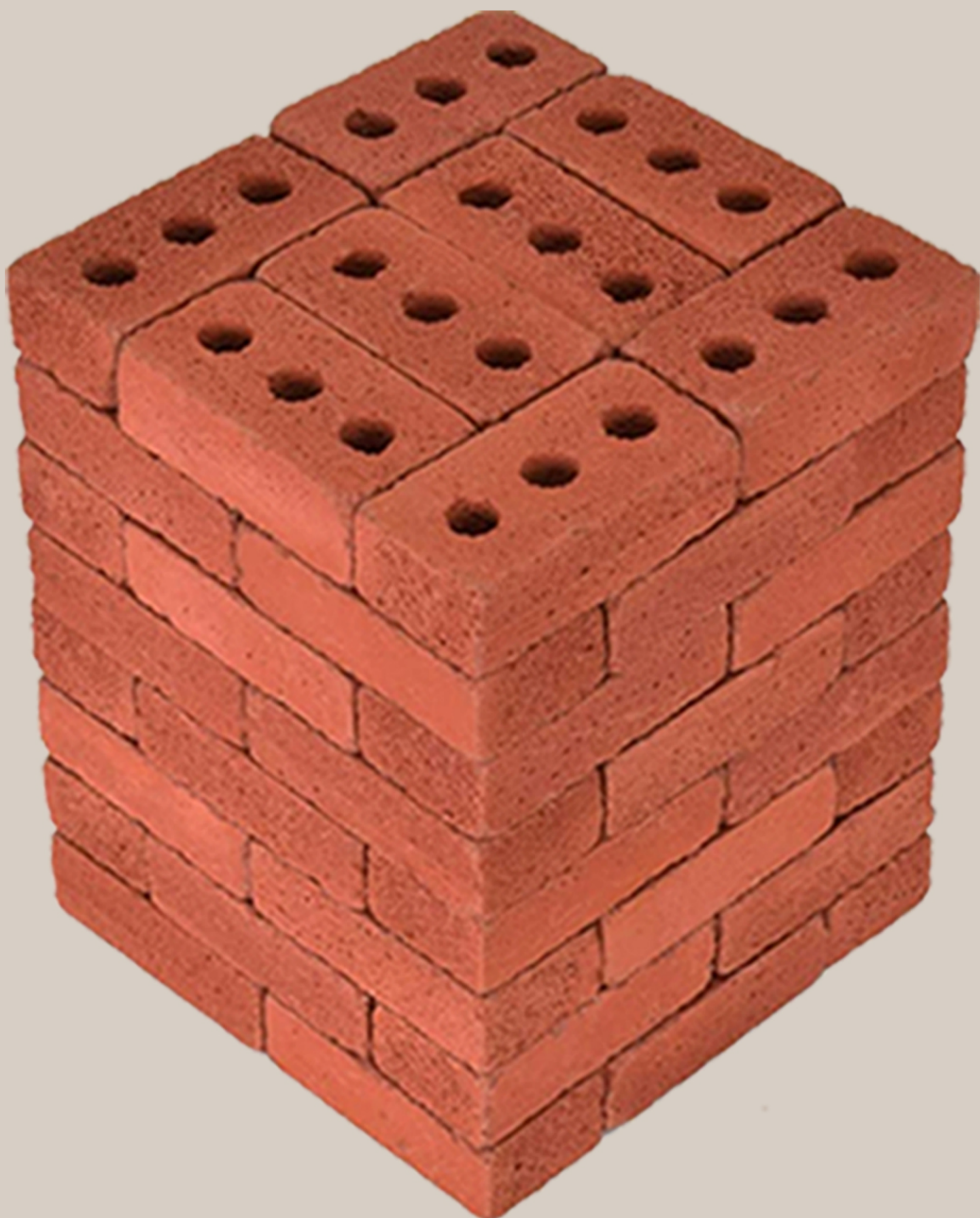
Sulphate
Determination
(X-RAY)



Fineness
Determination
(Blaine)



Compressive
Strength
Testing
(Computerize)



Red Bricks

Composition:

Made from clay and shale, with their characteristic red color derived from iron oxide.

Benefits

Excellent durability, thermal mass, and timeless aesthetic, often lasting for centuries.

Plastering Sand

Key Characteristics and Uses:

- **Consistency:** Fine, soft, and usually brown, this sand is clean-washed to remove impurities and prevent salt stains.
- **Applications:** Ideal for internal plastering (walls/ceilings) and external rendering for a smooth finish.
- **Mixing:** Commonly mixed with cement at a ratio of 4:1 or 5:1, depending on the coat required.
- **Properties:** Provides a creamy, workable mixture, reducing the risk of shrinkage or cracking upon drying. [Tarmac +5](#)

Concrete Stone

Key Features and Types

- **Concrete Pavers:** Pre-cast, interlocking units used for walkways, patios, and driveways, known for high resistance to abrasion.
- **Cast/Reconstructed Stone:** A refined form of concrete made to simulate natural materials like limestone, granite, or slate for architectural trim and garden ornaments.
- **Stamped Concrete:** Concrete that is textured on-site to mimic stone, brick, or wood, allowing for custom designs.
- **DIY Options:** Custom-shaped patio stones can be created using forms and concrete, providing a cheaper alternative to natural stone.

Readymix Concrete

- **Benefits:**
 - **Quality & Consistency:** Eliminates the variability of on-site mixing.
 - **Time & Efficiency:** Speeds up construction, requiring less on-site labor and equipment.
 - **Reduced Waste:** Precise, factory-controlled quantities mean minimal material loss.
 - **Versatility:** Suitable for various applications, including high-strength and self-compacting concrete.
- **Applications:**
 - **Infrastructure:** Used for foundations, high-rise buildings, and large-scale, durable, and reliable construction projects.
 - **Residential:** Often chosen for building homes, delivering consistent, durable, and high-quality results.



BRC MESH

BRC mesh is a high-strength, prefabricated welded steel reinforcement fabric used to strengthen concrete slabs, walls, and foundations. Manufactured from cold-drawn wire into a square or rectangular grid, it significantly speeds up construction, reduces steel wastage, and provides crack control in concrete structures.

Key Features and Benefits

- **High Quality & Consistency:** Produced using automatic welding machines, ensuring uniform wire spacing and consistent steel area, which is superior to site-bound manual reinforcement.
- **Faster Construction:** Pre-fabricated sheets or rolls minimize on-site labour and significantly speed up the laying process.
- **Reduced Wastage:** Offers significant material savings compared to traditional loose rebar.
- **Versatility:** Used in residential, industrial, and civil engineering projects.
- **Efficiency:** Pre-welded grids eliminate the need for manual bar placement, cutting, and knotting, significantly speeding up construction.
- **Consistent Quality:** Factory-manufactured mesh ensures uniform steel distribution and accurate spacing, which is difficult to achieve manually on-site.
- **Structural Integrity:** It provides critical tensile resistance, which is essential because concrete is strong in compression but weak in tension

Common Applications

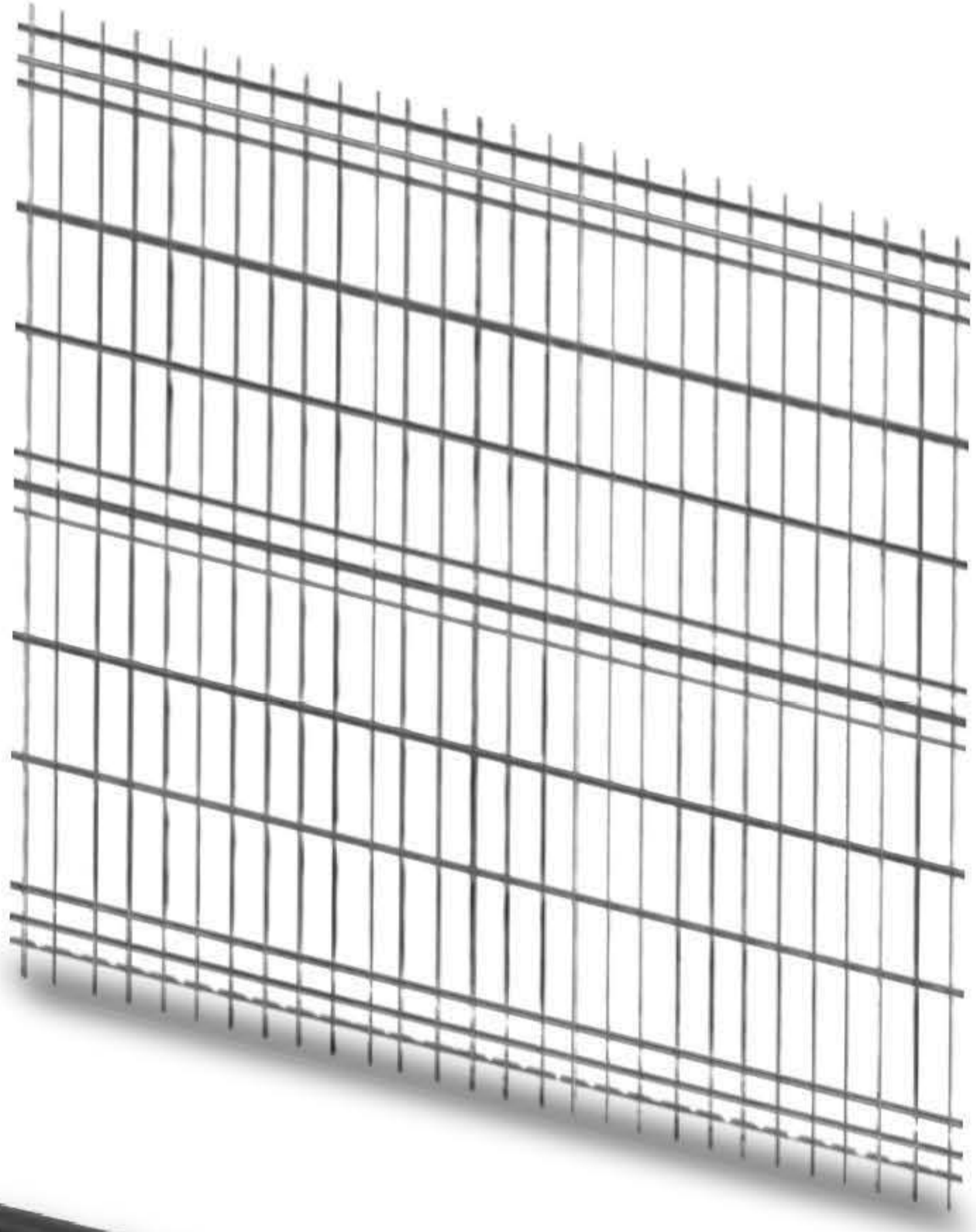
- **Concrete Reinforcement:** Slabs, floors, roofs, walls, footings, and retaining walls.
- **Infrastructure:** Pavements, culverts, drain covers, and precast components.
- **Other Uses:** Swimming pools, water tanks, and structural fireproofing.
- **Fencing:** Security fencing for residential or commercial areas

Specifications

- BRC 66/30
- BRC 66/8
- BRC 65
- BRC 65/8
- BRC A6, A7, A8, A9, A10, A12

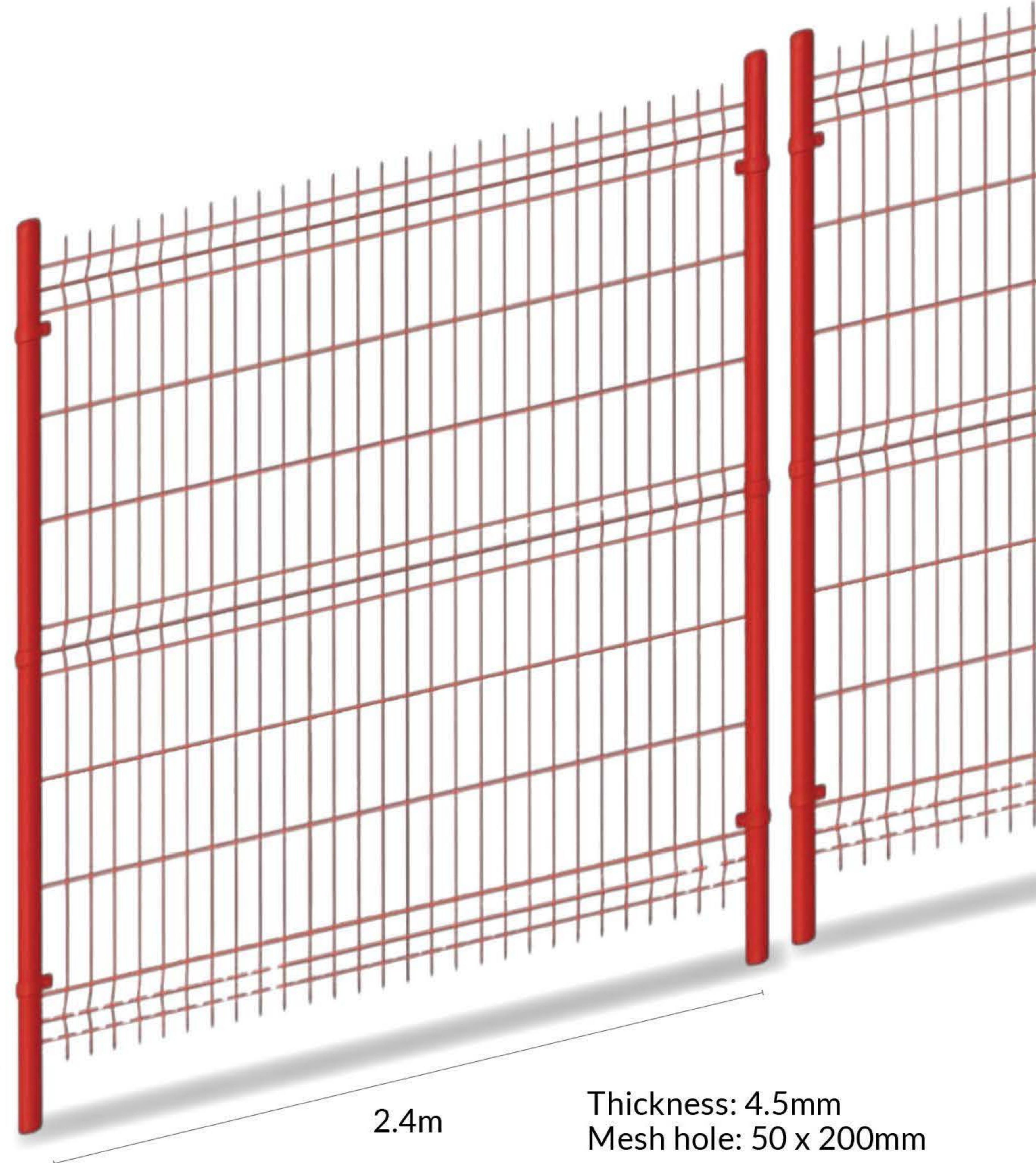


HOT DIPPED FENCE WIRE MESH WITH POWDER COATED



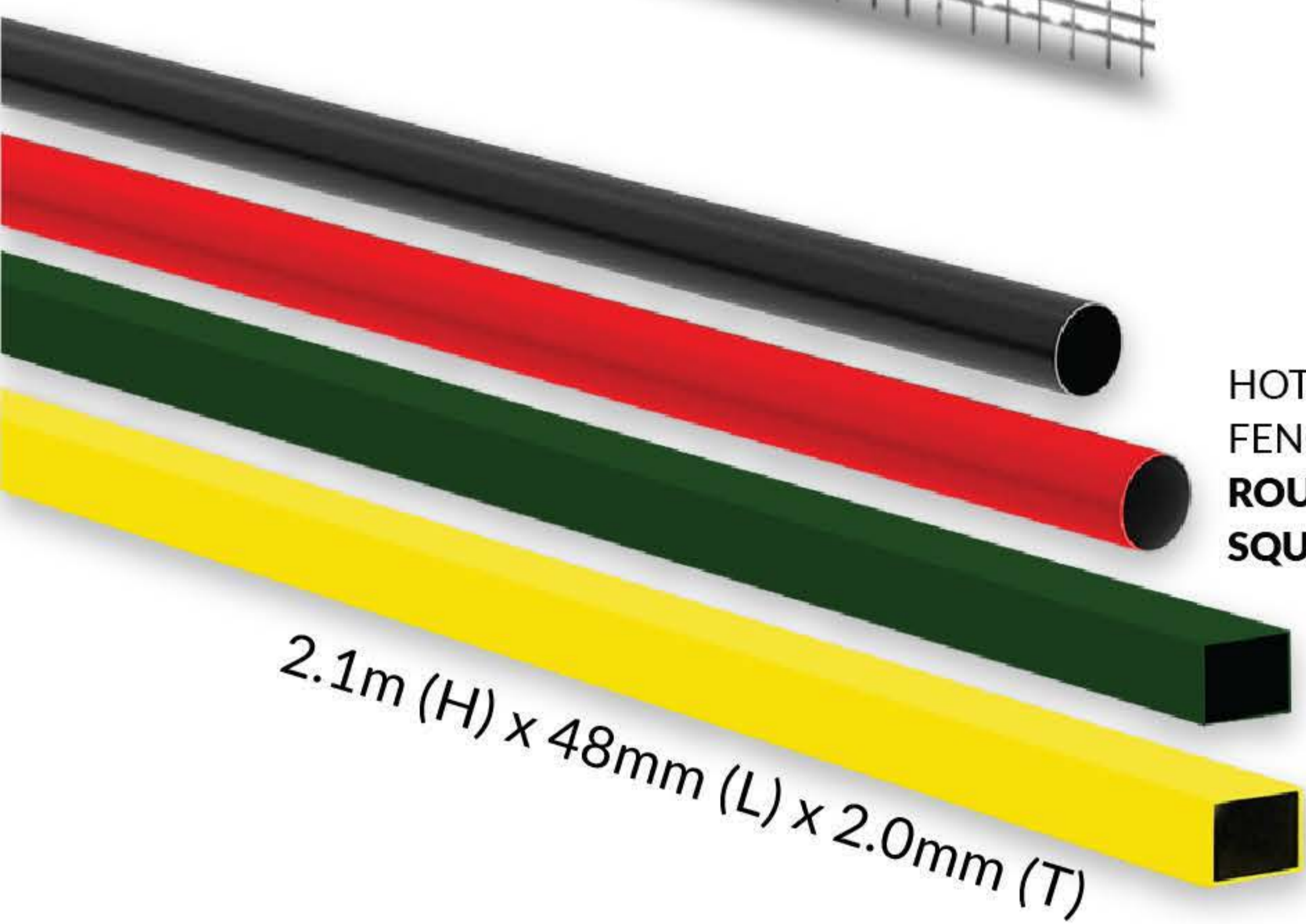
1.8m

HOT DIPPED
FENCE WIRE
MESH



2.4m

Thickness: 4.5mm
Mesh hole: 50 x 200mm



HOT DIPPED
FENCE POST
ROUND &
SQUARE

2.1m (H) x 48mm (L) x 2.0mm (T)

Engineered for strength, durability, and aesthetic appeal, this BRC fence wire mesh is hot-dip galvanized for superior corrosion resistance and then powder-coated for an added layer of protection and color customization. The unique rolled top and bottom edges enhance safety and structural integrity making it ideal for residential, commercial, and industrial perimeter fencing.



HOT DIPPED
FENCE BRACKET



HOT DIPPED FENCE
SQUARE CLIPS
WITH SCREWS



General Timber

General timber refers to structural or carcassing wood, usually softwood like pine or spruce, essential for construction framing, roofing, and flooring. It is generally kiln-dried (KD) to reduce moisture, increasing stability and durability, often used in common sizes

Key Aspects of General Timber

Types & Properties: Common softwood types include pine, spruce, and larch, prized for their strength, versatility, and quick growth. Timber is a strong, lightweight building material that offers excellent thermal and acoustic insulation.

Common Applications: Primarily used for general building construction, such as roofing joists, stud work for walls, timber framing, and sub-flooring.

Treatment & Processing: Timber is often treated to resist pests and rot (e.g., AST treatment) and is available as "fresh cut" or kiln-dried (KD) for reduced moisture content.

Sustainability: Softwoods are generally considered highly sustainable due to their rapid growth cycle compared to hardwoods.

Common Processing Terms

Rough Sawn: Wood in its natural state after being cut, often used where the surface won't be seen.

Planed Square Edge (PSE): Wood that has been smoothed on all sides with square edges, ready for visible joinery.

Treated Timber: Wood that has been chemically treated to resist rot and insects, often used for outdoor applications like fencing or decking.



GYPSUM BOARD

Gypsum board, commonly known as drywall, plasterboard, or wallboard, is a premier construction material used for interior walls and ceilings. It consists of a non-combustible gypsum core sandwiched between two thick sheets of paper or fiberglass mats.

Common Types and Their Uses

Different types of gypsum boards are designed for specific environmental needs, often identified by the colour of their paper facing:

Regular (White Board): The most common type, used for standard interior walls and ceilings in dry areas like bedrooms and living rooms.

Moisture-Resistant (Green Board): Features a wax-coated paper to resist humidity; ideal for bathrooms, kitchens, and laundry rooms.

Fire-Resistant (Type X): Contains glass fibers in the core to reinforce it against heat; required by building codes for garages and shared apartment walls.

Soundproof (Acoustic Board): Denser boards made with a mix of wood fibers and polymers to reduce noise transmission, used in home theatres or studios.

Mold-Resistant: Offers superior protection against mold and mildew compared to green board, suitable for areas with direct water contact.

Impact-Resistant: Reinforced with extra fibers to withstand physical abuse in high-traffic areas like schools or hospital corridors.

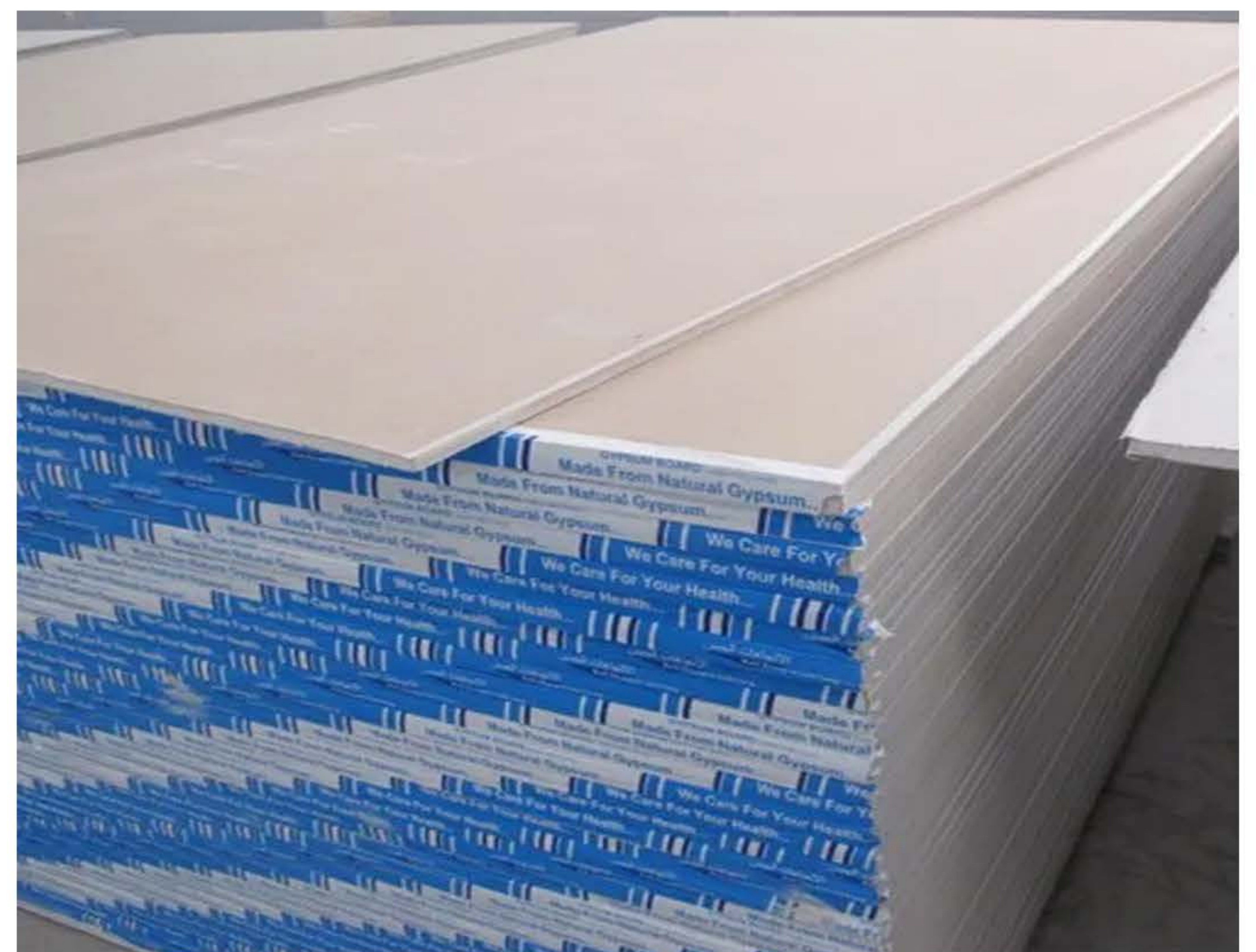
Key Benefits

Fire Resistance: Gypsum naturally contains about 21% water by weight, which is released as steam when exposed to fire, slowing heat transfer.

Ease of Installation: It is lightweight, easy to cut with a utility knife, and can be quickly fixed to wood or metal framing.

Smooth Finish: Provides a flat surface that is immediately ready for painting, wallpapering, or decorative textures.

Affordability: Generally, more cost-effective and faster to install than traditional wet plaster methods|



PLYWOOD

Plywood is a versatile engineered wood panel made by gluing thin layers of wood veneer (plies) together, with grains alternating at 90-degree angles for superior strength, stability, and resistance to warping. It is widely used in construction (subflooring, roofing), furniture, and cabinetry due to its high strength-to-weight ratio.

Key Characteristics and Types

Structure: Plywood is manufactured in odd numbers of layers (etc.) to ensure stability.

Strength: The cross-lamination technique provides high impact resistance, allowing it to handle heavy loads, making it ideal for structural applications.

Durability: It is resistant to splitting, cracking, and warping.

Grading and Thickness

Grading: Plywood is graded from A (highest quality, smooth) to D (lowest quality, often unsanded). Grades are often listed as a pair (e.g., A/B or C/D) representing the front and back face.

Thickness: Panels typically range from 3mm over to 30mm

Common Uses

Construction: Subflooring, wall sheathing, roof sheathing, and concrete formwork.

Furniture & Cabinets: Excellent for cabinet boxes, shelves, and table tops.

DIY Projects: Popular for its ease of use in home improvement and hobby projects.

Pros: High strength-to-weight ratio, high stability, reusable, cost-effective.



PVC PIPES

PVC (Polyvinyl Chloride) pipes are durable, lightweight, and corrosion-resistant thermoplastics commonly used for plumbing, irrigation, and sewage. They are popular for their easy, leak-free installation, high strength, and long service life. Available in various sizes, PVC pipe is ideal for both pressure and non-pressure applications, including potable water transportation.

Key Features and Benefits of PVC Pipes:

- **Corrosion Resistance:** Immune to electrochemical corrosion and resistant to acids, alkalis, and salts, making them ideal for underground use.
- **Easy Installation:** Lightweight and easy to cut, which reduces transportation and labor costs.
- **Long-Lasting:** They have a long service life, sometimes lasting 100 years or more.
- **Smooth Surface:** High flow capacity with lower friction, which prevents blockages.
- **Environmentally Sound:** Recyclable and require less energy to produce compared to alternatives.

Common Uses of PVC Pipes:

- **Plumbing & Water Supply:** Used for potable water, as they do not affect water quality.
- **Drainage & Sewage:** Ideal for underground sewage, waste disposal, and drainage systems.
- **Irrigation:** Widely used in agriculture due to their low pressure loss and resistance to environmental damage.
- **HVAC:** Used in air conditioning and ventilation systems.

Key Considerations:

Standards: PVC pipes are made to conform to various ASTM standards for different applications.

Types of PVC: While standard PVC is rigid, PVC-U (Unplasticized PVC) is commonly used for its rigidity and strength, especially in pipes

