

ARCHITECTURAL MOLDED COMPOSITES



Petra Systems – 25 years in architectural composites

UHPC

Lafarge Ductal flat panel with customizable surface shape and texture (form liner, sandblasting, aggregates).

Reinforced with PVA or steel fibers

128 MPa compressive strength, **3-5x** precast, GFRC or other concretes.

very low water absorption—superior on freeze-thaw climates.

Excellent substitute for flat panel GFRC and FRC.

GFRC

Custom product using standard cement and glass fibers,

3D molded with integrated steel structure.

Texture options include form liners, sandblasting, and aggregates.

Sprayed material process with infinite design flexibility.

Brick Faced GFRC

Everything GFRC +

Innovative brick shapes. 1" brick slips with grooves and mechanical fastening, cast in GFRC for strength.

Uses low water, fast to apply and cure lime-based mortar for accurate aesthetic.

Infinite design flexibility

GRG

Custom product. Interiors only.

Very precise

Industry standard gypsum. Industry standard glass fibres.

3D mold process, design skills critical.

Texture with form liner, sand blasting, aggregate choice Hand laid and sprayed material process.

Infinite design flexibility

100+ Year lifecycle



Common to all

Integrated design and mfg. essential. High design freedom.

Light, little to no slab reinforcement 100-year durability

Precise design = molds = precise results..













Petra GFRC

- 78 panels, 8 molds.
- installed 1 floor every three days.
- rainscreen self supporting façade.

ELISE TOWER

North York, ON

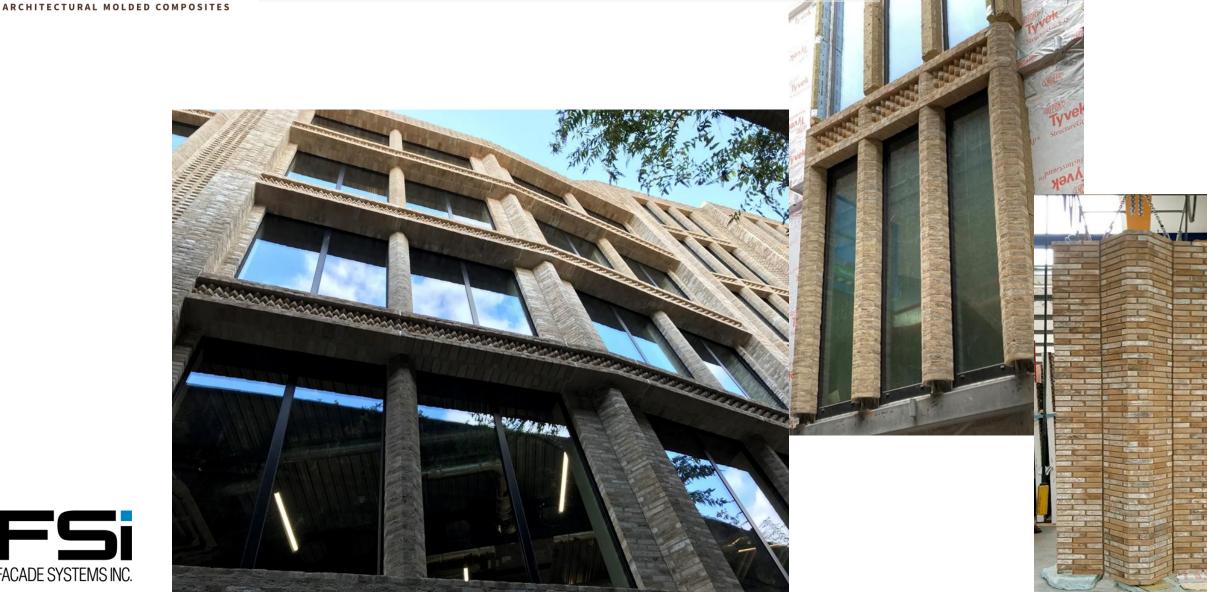








Petra Brick Faced GFRC







Approach Petra Cast promotes a collaborative approach, investing in early development with architects and builders.

Optimize fabrication and construction **processes and costs** while enhancing the design intent.

We believe that precision is free, even less expensive than trying to make up design tolerance compromises later in the process

Services

- Budgeting
- Initial structural and fabrication design
- Comprehensive preconstruction proposal.
- Design collaboration and value engineering.
- Post award engineering and design including façade support system.
- Manufacturing
- Delivery
- Construction collaboration

Proximity Pays Off





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