

Comparative Analysis of PFC & GFRC

MATERIAL FEATURE	PFC (Polyfibercrete®)	GFRC (glass fiber reinforced concrete)
MANUFACTURING PROCESS	Easy process of pouring concrete into a single mold.	Complex process; GFRC sprayed into molds, pieces then attached to a steel frame, seams are grouted between castings.
COST	Low cost due to simple manufacturing process.	Higher cost due to complex fabrication.
MAINTENANCE	Little to no seams ensure low maintenance. Very little maintenance required. Same care as for concrete tables.	Large number of seams. Seams are where 90% of maintenance problems occur.
LONGEVITY	Solid all the way through; graffiti easily pressure washed, impact vandalism smoothed & re-stained.	Walls only 1" thick. Impact vandalism creates hard to repair holes.
TEXTURE	Polymer foam additive exposes tiny air bubbles, providing tiny fingers with non abrasive handholds.	Several layers of stain required to blend seams gives the texture a painted feel rather than a rock like texture.
SHAPES & FEATURES	Manufacturing process allows for various shapes and features such as really big caves, tunnels, cracks, and fissures.	Unable to have large caves, deep cracks and tunnels because rocks need internal steel frame for structural support. Shapes tend to be flat topped and square in nature. No variety.
WEIGHT	Heavy weight ensures product cannot be damaged and is long lasting.	Lightweight has approximately 10-20% lower installation and shipping costs.
ROCK RELIEF	Large ledges and handholds, perfect for children's playgrounds.	Able to create small fossils and tiny rock edges. Great for technical or serious rock climbers.
ROCK COLOR	PFC has an integral color throughout the product. A light stain and color is added after production allowing for easy maintenance.	Seams have different texture and porosity causing variations in stain; often compensated by applying large amounts of stain which reduces rock like texture. Increased maintenance to repair graffiti.

