

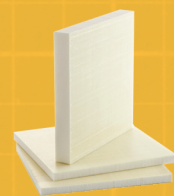
Transforming Modular & Offsite Construction with Advanced Composites



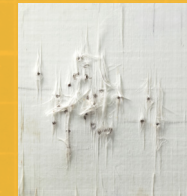
ADVANCED COMPOSITES FOR BUILDING & CONSTRUCTION



Hammerhead™ FR Flame Retardant Composite Panels & Laminates



Hammerhead™ & Polystrand™ Composite Panels



GlasArmor™ & ThermoBallistic™ Ballistic Panels



Polystrand™ Continuous Fiber Laminates



Polystrand™ Continuous Fiber Tapes



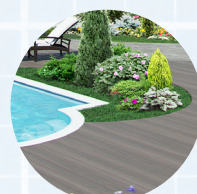
Garage Doors

Impact & corrosion resistance; high flexural strength; customized dimensions & finishes; weatherability; UV stability; weight reduction



Flood Barriers

Moisture & corrosion resistance; durable; will not contribute to mold growth



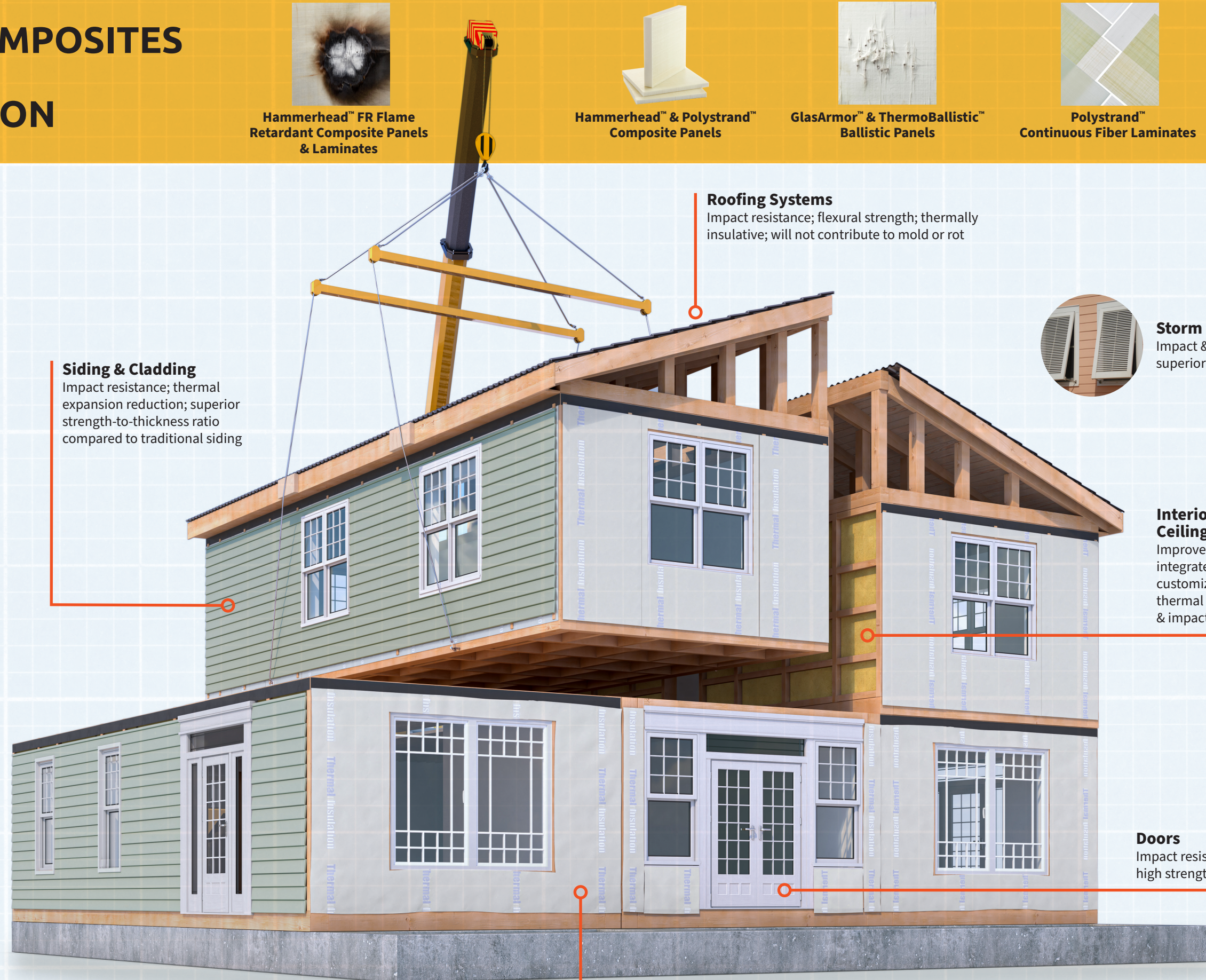
Composite Decking & Lumber

Reinforcements for increased strength; material & weight reduction



Safe/Panic Rooms

Ballistic & impact resistance



Roofing Systems

Impact resistance; flexural strength; thermally insulative; will not contribute to mold or rot

Siding & Cladding

Impact resistance; thermal expansion reduction; superior strength-to-thickness ratio compared to traditional siding



Storm Shutters

Impact & ballistic resistance; superior strength-to-weight ratio

Interior Wall, Floor, & Ceiling Panel Systems

Improved structural integrity; integrated fire protection; customized dimensions & finishes; thermal insulation; water, pest, & impact resistance

Doors

Impact resistance; ballistic resistance; high strength-to-weight ratio

Exterior Sheathing

Continuous insulation; impact, moisture & rot resistance; lightweight construction



Cabinetry & Storage

Weight reduction; customized dimensions & finishes

MATERIAL SOLUTION	DESCRIPTION	KEY CHARACTERISTICS	POTENTIAL APPLICATIONS
Hammerhead™ FR Flame Retardant Composite Panels	Industry-first flame retardant thermoplastic composite panels that meet ASTM E84 Class A standards for flame spread and smoke developed and passed NFPA 286 corner room burn testing	<ul style="list-style-type: none"> • Excellent flame performance • Moisture, UV, corrosion, impact, and rot resistant • Lightweight structural integrity • Reduce labor cost and time 	<ul style="list-style-type: none"> • Interior Wall, Floor & Ceiling Panel Systems • Garage Doors • Interior & Entry Doors • Exterior Sheathing • Siding & Cladding • Kitchen Cabinetry
Hammerhead™ and Polystrand™ Composite Panels	Thermoplastic composite panels constructed with Polystrand™ continuous fiber laminates thermally bonded to thermoplastic foam or honeycomb cores	<ul style="list-style-type: none"> • Moisture, UV, corrosion, impact, and rot resistant • Lightweight structural integrity • Reduce labor cost and time 	<ul style="list-style-type: none"> • Garage Doors • Interior Entry Doors • Interior Wall, Floor & Ceiling Panel Systems • Exterior Sheathing • Siding & Cladding • Kitchen Cabinetry
Polystrand™ Continuous Fiber Tapes & Laminates	High strength unidirectional (UD) glass fibers combined with thermoplastic resins available in unidirectional tapes or multi-ply laminates	<ul style="list-style-type: none"> • High strength and stiffness • Enables impact resistance • Formulations available to meet ASTM E84 Class A and Class B flame/smoke rating 	<ul style="list-style-type: none"> • Composite Decking • Interior & Entry Doors • Roofing Systems
GlasArmor™ Ballistic Resistant Panels	Ballistic protection constructed from layers of 0°/90° woven E-glass fiber reinforcements with a proprietary thermoset resin system	<ul style="list-style-type: none"> • UL 752 Level 1–3 compliant • Less than 25% the weight of comparable steel panel • 1-hr fire rating per ASTM E119* 	<ul style="list-style-type: none"> • Safe/Panic Rooms • Garage Doors • Interior & Entry Doors
ThermoBallistic™ Thermoplastic Panels	Industry-first thermoplastic ballistic resistant panels thermally formed with layers of 0°/90° UD E-glass fiber reinforcements and polyolefin-based resin systems	<ul style="list-style-type: none"> • UL 752 Level 3 compliant • Extremely lightweight • Moisture, UV, and corrosion resistant 	<ul style="list-style-type: none"> • Safe/Panic Rooms • Garage Doors • Interior & Entry Doors

* UL Level 3 panel was fire tested as part of a wall system with steel studs and drywall facesheet

1.844.4AVIENT
www.avient.com



Copyright © 2025, Avient Corporation. Avient makes no representations, guarantees, or warranties of any kind with respect to the information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as “typical” or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Avient makes no warranties or guarantees respecting suitability of either Avient’s products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. AVIENT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.