



GEF Incorporated
Innovative Solutions in Fiberglass

DURASHIELD HC[®]

FIBERGLASS HOLLOW CORE BUILDING PANELS



- **Lightweight**
- **Easy to Install**
- **Rot, Rust & Mildew Resistant**
- **Low in Electrical and Thermal Conductivity**
- **Strong**
- **Flame Retardant**

DURASHIELD HC[®] is a cost-effective alternative to DURASHIELD[®] due to its unique hollow core design with internal stiffeners. The panel is a sensible choice for any type of roofing, flooring, enclosures or screening that does not require insulation. It is a custom designed tongue-and-groove building panel for quick assembly and easy installation in various applications.

The pultruded panel's unique hollow core and intermediate ribs provide extra stiffness for uses such as decking, cladding or tank covers. The panels can be bonded together with standard adhesives and attached to structural shapes with bolts or screw fasteners. These standard polyester panels will not rot, rust or mildew, which makes them ideal for high moisture environments including saltwater.

DURASHIELD HC[®] panels are designed to be used as walls, roofs and covers. Typical applications are:

- Cladding
- Decking
- Cellular Enclosures and Screening
- Tank Covers
- Cooling Tower Partition Walls
- Buildings and Enclosures when Insulation is Not Required



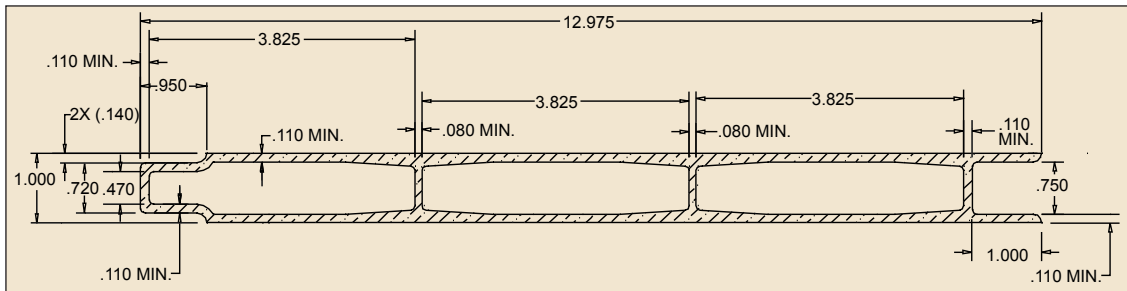
Materials of Construction

A synthetic veil is incorporated into the surface to improve weathering, corrosion and UV resistance. The standard resin system of DURASHIELD HC[®] is polyester; however, it can be custom ordered with a vinyl ester resin for highly corrosive applications. Both resin systems include flame retardants and meet the requirements of a Class 1 flame spread per ASTM E84 and the self-extinguishing requirements of ASTM D-635. The panel weighs 3.27 lbs/linear ft.

Sizes

DURASHIELD HC[®] is available in standard 1" x 12" panels. The panels can be produced in any length that is practical.

Dimensional Details



DURASHIELD HC[®] 1" Panel Allowable Uniform Load (psf)

SPAN (ft.)	@Δ=span/60		@Δ=span/120		@Δ=span/180		@Δ=span/240		@Δ=span/300		@Δ=span/360	
	LOAD (lbs/ft ²)	Δ (IN.)	LOAD (lbs/ft ²)	Δ (IN.)	LOAD (lbs/ft ²)	Δ (IN.)	LOAD (lbs/ft ²)	Δ (IN.)	LOAD (lbs/ft ²)	Δ (IN.)	LOAD (lbs/ft ²)	Δ (IN.)
2.0	1727	0.40	863	0.20	576	0.13	432	0.10	345	0.08	288	0.07
2.5	1045	0.50	523	0.25	348	0.17	261	0.13	209	0.10	174	0.08
3.0	671	0.60	335	0.30	224	0.20	168	0.15	134	0.12	112	0.10
3.5	451	0.70	225	0.35	150	0.23	113	0.18	90	0.14	75	0.12
4.0	315	0.80	157	0.40	105	0.27	79	0.20	63	0.16	52	0.13
4.5	226	0.90	113	0.45	75	0.30	57	0.23	45	0.18	38	0.15
5.0	168	1.00	84	0.50	56	0.33	42	0.25	34	0.20	28	0.17
5.5	127	1.10	64	0.55	42	0.37	32	0.28	25	0.22	21	0.18
6.0	99	1.20	49	0.60	33	0.40	25	0.30	20	0.24	16	0.20
6.5	78	1.30	39	0.65	26	0.43	20	0.33	16	0.26	13	0.22
7.0	63	1.40	31	0.70	21	0.47	16	0.35	13	0.28	10	0.23
7.5	51	1.50	26	0.75	17	0.50	13	0.38	10	0.30	9	0.25
8.0	43	1.60	21	0.80	14	0.53	11	0.40	9	0.32	7	0.27

PERFORMANCE: This table is offered as a guide only. The effects of sustained impact or dynamic loads, the particular corrosive environment, and/or elevated temperatures have not been factored into these tables. Please consult the Strongwell *Design Manual* at www.strongwell.com for guidance and design considerations when applications include any of these effects.

NOTE: Figures controlled by stress with a safety factor of 1.50.



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