



# HexWeb® HRH-36

Para-Aramid/Phenolic Core

## Product Data

Supplied by

**AMBERCOMPOSITES**

### Description

HexWeb® HRH-36 is manufactured using Kevlar® paper. The standard resin system is phenolic. Alternate resin systems may be available upon request.

### Features

- Mechanical Properties Equivalent to Korex®
- Low Moisture Pickup
- Excellent Thermal Stability
- Smooth Cell Wall Finish

### Applications

HexWeb® HRH-36 is a high performance non-metallic core, available in a wide range of densities, suitable for most composite sandwich applications. It can be readily heat formed to help produce complex components and offers similar mechanical properties to Korex core as well as comparable moisture pickup. In addition, HexWeb® HRH-36 offers a weight reduction over higher density Nomex® honeycomb cores.

### Standard Dimensions

HexWeb® HRH-36 is currently made in panel sizes  $1250 \pm 50 \times 2500 \pm 100$ mm for thicknesses up to 860mm. Flex-Core® and overexpanded cell configurations may be available upon request. For requirements involving other size panels, pieces cut-to-size, or formed parts, contact the nearest Hexcel Sales Office.

### Thickness Tolerance

Tolerances on cut thickness are as follows:

3 to 50mm tolerance will be  $\pm 0.125$ mm

50 to 100mm tolerance will be  $\pm 0.25$ mm

100mm and over tolerance will be  $\pm 3$ mm

### Type Designation

HexWeb® HRH-36 honeycomb is designated as follows:

Material – Cell Size – Density

#### European Sourced Material

Example:- **HRH-36 – 3.2 – 48**

Where:

**HRH-36** - designates honeycomb type

**3.2** - is the cell size in mm

**48** - is the nominal density in

kg per cubic metre

#### U.S. Sourced Material

Example:- **HRH-36 – 1/8 – 3.0**

Where:

**HRH-36** - designates honeycomb type

**1/8** - is the cell size in inches

**3.0** - is the nominal density in

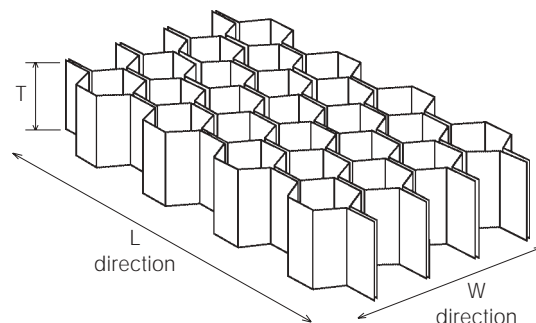
pounds per cubic foot

### Dimensional Nomenclature

T = Thickness or cell depth

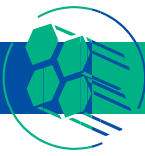
L = Ribbon direction or width

W = Long direction or direction perpendicular to the ribbon



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## Availability

HexWeb® HRH-36 will be shipped from Welkenraedt, Belgium or Casa Grande, Arizona, USA. Lead times will vary due to core type. Contact the nearest Hexcel Sales Office for delivery information.

## Mechanical Properties

The following mechanical properties are based on preliminary testing of these products at 12.7mm thickness. Tests were per MIL-STD-401.

Hexcel Honeycomb Designation	Compression		Plate Shear			
	Bare	Stabilized	L Direction		W Direction	
	Strength Mpa	Strength Mpa	Strength Mpa	Modulus Mpa	Strength Mpa	Modulus Mpa
HRH-36-3.2-40	1.45	1.59	1.17	97	0.69	41
HRH-36-3.2-48	2.33	2.4	1.45	138	0.86	60
HRH-36-3.2-64	4.2	4.35	2.38	150	1.43	80
HRH-36-3.2-72	3.66	4.28	2.76	207	1.52	83
HRH-36-3.2-96	6.76	6.9	3.79	276	2.16	110
HRH-36-4.0-38	1.52	1.72	1.21	83	0.76	48
HRH-36-4.0-72	4.35	4.8	2.57	153	1.55	90
HRH-36-4.8-28	0.9	1	0.78	63	0.43	30
HRH-36-4.8-32	0.97	1.1	0.83	69	0.48	34
HRH-36-4.8-40	1.38	1.72	1.17	97	0.62	41
HRH-36-4.8-48	2.3	2.45	1.57	127	0.9	57
HRH-36-4.8-72	4.14	4.48	2.76	159	1.52	69
HRH-36-4.8-96	6.9	7.24	3.45	186	2.07	90

These are estimated minimum average values based on limited test data.

## Important

All information is believed to be accurate but is given without acceptance of liability. Users should make their own assessment of the suitability of any product for the purposes required. All sales are made subject to our standard terms of sale which include limitations on liability and other important terms.

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For further information, please contact your nearest sales office, or visit our website at [www.hexcelcomposites.com](http://www.hexcelcomposites.com)

### Australia

Suite 2, 86 Grimshaw Street  
Greensborough, Victoria 3088  
Tel: 61 3 9432 7100  
Fax: 61 3 9432 7200

### China

Room B707, Yin Hai Bldg.  
250 Cao Xi Rd  
Shanghai 200233  
Tel: 86 21 6483 6741/2  
Fax: 86 21 6483 6744

### Japan - Joint Venture

DIC - Hexcel Limited  
Room 603, Santsu-Mori Bldg.  
2-22-1 Nishi - Shimbashi  
Minato-Ku, Tokyo 105  
Tel: 81 3 5401 0271  
Fax: 81 3 5401 0270

### USA

900 Main Street South,  
Building 1, Suite 104,  
Southbury, CT 06488  
Tel: 1 203 267 1414  
Fax: 1 203 267 1561

### Austria

Industriestrasse 1  
A-4061, Pasching  
Tel: 43 (0)7229 7720  
Fax: 43 (0)7229 77299

### France

ZI La Plaine, B.P.27 Dagneux  
01121 Montluel CEDEX  
Tel: 33 (0)4 72 25 26 27  
Fax: 33 (0)4 72 25 27 30

### Spain

Bruselas, 10 - 16  
Polig. Ind. "Ciudad de Parla"  
28980 Parla, Madrid  
Tel: 34 91 664 4900  
Fax: 34 91 698 4914

### USA

42705 Grand River  
Suite 201  
Novi, MI 48375  
Tel: 1 248 344 8688  
Fax: 1 248 305 9760

### Belgium

Rue Trois Bourdons, 54  
B-4840 Welkenraedt  
Tel: 32 87 307 411  
Fax: 32 87 882 895

### Germany

Postfach 1560  
21655 Stade  
Tel: 49 4141 7879-00  
Fax: 49 4141 7879-01

### United Kingdom

Duxford, Cambridge  
CB2 4QD  
Tel: 44 (0)1223 833141  
Fax: 44 (0)1223 838808

### USA

2350 Airport Freeway, Suite 550  
Bedford, TX 76022-6027  
Tel: 1 817 315 3939  
Fax: 1 817 571 8629

### Brazil

Av. J. Guilhermino, 474/72  
S.J.Campos, SP 12210-130  
Tel: 55 12 3941 2242  
Fax: 55 12 3923 1186

### Italy

Via San Cristoforo, 44  
21047 Saronno (VA)  
Tel: 39 02 96709082  
Fax: 39 02 9600809

### USA

11711 Dublin Blvd.  
Dublin, CA 94568-2832  
Tel: 1 925 551 4900  
Fax: 1 925 828 9202

### USA

16310 NE 80th Street, Suite 102  
Redmond, WA 98052  
Tel: 1 425 558 4400  
Fax: 1 425 861 5847