

## CFRP Honeycomb Core

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed CFRP Honeycomb Core to develop thermally stable light weight structure which can be used for optical payload bench for satellite applications.



### Salient Features

- ✦ Light weight , Robust Process.
- ✦ Very low CTE along thickness compared to Aluminium honey comb core.
- ✦ Product can be realised with any type of prepreg material.
- ✦ Process is flexible.
- ✦ Manufacturing Cost is reasonable.

### Major Specifications

Property	CFRP Honeycomb core	Aluminium Honeycomb Core
Core Density	33 kg/m <sup>3</sup>	32 kg/m <sup>3</sup>
Linear CTE	Near Zero in all directions	+23.2 $\mu\text{m/m/}^{\circ}\text{C}$
Mechanical Properties like Shear Strength, Shear Modulus, Compressive Strength and Compression Modulus.	Superior as compared to Aluminium Honeycomb core	
Service Temperature Range (-50 $^{\circ}\text{C}$ to +150 $^{\circ}\text{C}$ )	Very good	Good

## Technology Transfer

URSC-ISRO offers to transfer this technology of CFRP Honeycomb Core developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining knowhow may write giving details of their present activities, infrastructure and facilities. To carry out this activity industry must have facilities like cleanroom, autoclave and composite structure manufacturing knowledge.

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🌐 <https://www.ursc.gov.in/industry/index.jsp>