



L-3 ESSCO's solid laminate radomes are rigid, self-supporting, shell-type structures. Unlike sandwich radomes that use a multi-layer construction, these radomes are constructed with solid fiberglass walls and can provide a cost-effective option in smaller sizes.



CONSTRUCTION AND MATERIALS

For radomes up to 10 ft. (3.05m) in diameter, single piece radomes are available. To minimize shipping problems with diameters 10 ft. and above, multiple panel designs can be used. As with all other L-3 ESSCO radomes, preimpregnated fiberglass materials are used to help carefully control resin content and thickness. To keep costs low on multi-panel designs, L-3 ESSCO solid laminate radomes panels are not randomly oriented. Instead, they are generally arranged in neat vertical and

horizontal rows. This architecture minimizes costs but allows for greater boresight and sidelobe degradation than our other rigid radomes with a randomized panel design. The panels are easy to assemble from inside the radome, using our captivated T-nut design.

APPLICATIONS

- Can be used effectively for many communication and weather radar antennas operating below 3 GHz
- Often suitable for commercial SATCOM, EMI test facilities and low-frequency tracking applications
- Designs are also available for higher frequency applications, but are usually used for smaller radomes
- For radomes up to 12 ft. (3.66m) in diameter, wind speeds of 150 mph or higher can be withstood
- For radomes above 12 ft., lower wind speeds are appropriate as the costs and electromagnetic performance start to suffer with thicker radome walls



Military vehicle image courtesy of Thales; shipboard radome image courtesy of Harris Corporation.



SOLID LAMINATE RADOMES

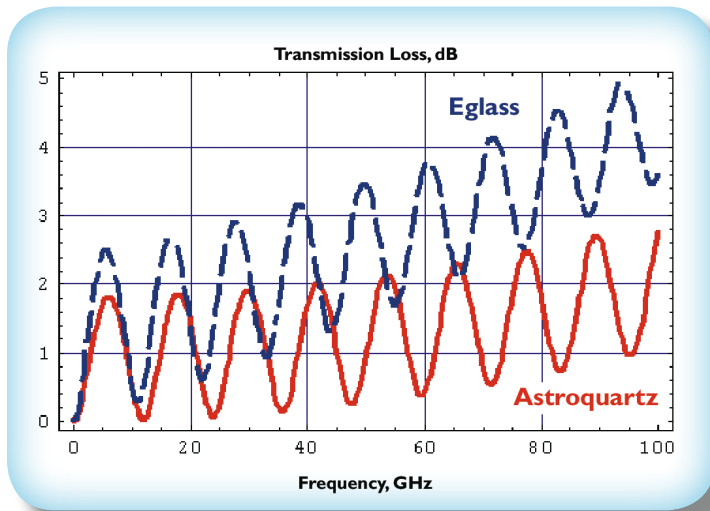


ELECTROMAGNETIC PERFORMANCE

L-3 ESSCO's solid laminate radomes perform well at frequencies below 3 GHz or at higher frequencies when the wall thickness can be tuned for narrow bandwidths. The chart below provides typical electromagnetic performance data.

STANDARD SIZES

Please contact us for detailed size information.



Small one-piece solid laminate radomes for high-frequency applications.



18-ft. (5.5m) diameter solid laminate radome, shipboard application.



5-ft. (1.5m) diameter shipboard radome application.



L-3 ESSCO

90 Nemco Way
Ayer, MA 01432, USA
Tel: 978.568.5150
Fax: 978.772.7581
Email: Info.ESSCO@L-3com.com

Rivercourt Offices
Penthouse Floor
Robert Street
Cornmarket Square
Limerick City, Ireland
Tel: + 353.87.6779729

www.L-3com.com/ESSCO

This technical data and software is considered as Technology Software Publicly Available (TSPA). No license required (NLR) as defined in Export Administration Regulations (EAR) Part 734.7-11. SND. Data, including specifications, contained within this document are summary in nature and subject to change at any time without notice at L-3 Communications' discretion. Call for latest revision. All brand names and product names referenced are trademarks, registered trademarks, or trade names of their respective holders. 9/16