

# Lexan\*Thermoclear\* Sheet LTC2R10

## Product Datasheet

### Description

LTC2R10 sheet is a member of the Lexan\* Thermoclear\* sheet range of high quality/multiwall polycarbonate glazing sheets extruded from Lexan resin. This product has twin wall rectangular structure, which may be an excellent candidate for vertical and curved Applications. Also, it offers high impact strength, excellent light transmission, light weight, easy installation, long-term weather resistance, and outstanding thermal insulation properties.



### Typical Property Values ♦

#### Property

| Property                             | Test Method | Unit                          | Value                   |
|--------------------------------------|-------------|-------------------------------|-------------------------|
| <b>Physical</b>                      |             |                               |                         |
| Specific Gravity †                   | ASTM D792   |                               | 1.20                    |
| Thickness                            |             | inches                        | .393                    |
| Weight                               |             | lbs/ft <sup>2</sup>           | 0.40                    |
| Light Transmission                   | ASTM D 1003 | %                             |                         |
| Clear                                |             |                               | 80                      |
| Bronze                               |             |                               | 50                      |
| Opal                                 |             |                               | 40                      |
| White                                |             |                               | 20                      |
| Green                                |             |                               | 66                      |
| Refractive Index †                   | ASTM D542   |                               | 1.586                   |
| Cold Forming, Minimum Bend Radius †† |             | inches                        | 69                      |
| <b>Thermal</b>                       |             |                               |                         |
| Coefficient of Thermal Expansion †   | ASTM D696   | in/in x °F                    | 3.75 x 10 <sup>-5</sup> |
| HDT, 66 psi, 0.250", unannealed †    | ASTM D648   | °F                            | 280                     |
| U-Value                              | ISO 8301    | Btu/hr x ft <sup>2</sup> x °F | 0.53                    |
| Shading Coefficient                  | ASHRAE      |                               |                         |
| Clear                                |             |                               | .98                     |
| Bronze                               |             |                               | .78                     |
| Opal                                 |             |                               | .70                     |
| White                                |             |                               | .53                     |
| Green                                |             |                               | .89                     |
| Solar Transmission                   | ASHRAE      | %                             |                         |
| Clear                                |             |                               | 85                      |
| Bronze                               |             |                               | 60                      |
| Opal                                 |             |                               | 50                      |
| White                                |             |                               | 30                      |
| Green                                |             |                               | 73                      |

♦ These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local GE Plastics, Specialty Film & Sheet representative.

†) Properties of Resin

†† The cold bending must be parallel to the ribs of the sheets. Ratio between width and length should be > 1:2



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### MODEL BUILDING CODE#

Lexan\* Thermoclear\* LTC2R10 Sheet meets the light-transmitting plastics flammability requirements set by the International Building Code. Legacy reports, BOCA 22-21, ICBO ER3286, and SBCCI 9592B are available at [www.icc-es.org/Evaluation\\_Reports/index.shtml](http://www.icc-es.org/Evaluation_Reports/index.shtml).

| Test           | Rating   |
|----------------|----------|
| ASTM D1929     |          |
| Flash ignition | 940 °F   |
| Self ignition  | >1000° F |
| ASTM D635      | CC1      |
| ASTM E-84      | Class A  |

*# These are typical properties and are not intended for specification purposes. If minimum certifiable properties are required, please contact your local GE Plastics representative or the GE Plastics Quality Services Department.*

### UV Resistance

The complete Lexan Thermoclear sheet range features a proprietary UV resistant surface designed to protect the sheet against the degrading effects of ultra-violet radiation in natural sunlight. This side must always be installed facing outwards.

### Warranty

Clear Lexan Thermoclear sheet is backed by a ten-year limited written warranty against yellowing, loss of light transmission and hail damage. (Request details of limited warranty and maintenance instructions.)

### Non-Standard Specifications

All GE Plastics multi-wall sheet products in non-standard widths, lengths, and colors are quoted on request. Such arrangements may affect prices, warranty terms and/or other conditions of sale. Please contact your nearest GE Plastics Sales Office or approved Lexan Thermoclear sheet distributor to determine capability.

### Installation

For more advice and information on installation, contact your nearest GE Plastics Sales Office or Approved Lexan Thermoclear Sheet Distributor.



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### Availability (LTC2R10)

Specifications are as follows:

| Width                                    | Length           | Standard Colors  | Manufacturing Tolerances                       |
|--|------------------|--|--|
| 47.25"<br>48"<br>71.25"<br>72"<br>82.68" | 36"<br>to<br>50' | Clear 112<br>Bronze 5109<br>Opal 825074<br>White 825075<br>Green GN7078T | Overall Gauge $\pm 0.02''$<br>Weight $\pm 5\%$ |

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