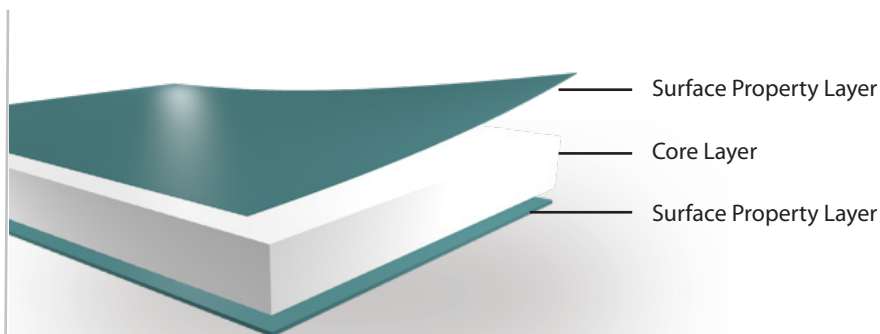


# Lumirror. F7R

## Applications

- Solar Window
- Release liner
- Casting



Lumirror F7R

## VERY CLEAR THREE LAYER PET FILM

## Summary

F7R is an economy grade solar film with heat shrinkage properties designed to satisfy the needs of specific release applications.

F7R surface and optical properties are strictly controlled by co-extrusion technology.

## Technical Data \*

| PROPERTIES                               |                   | METHOD     | UNITS              | TYPICAL VALUES |      |      |
|--|-------------------|------------|--------------------|----------------|------|------|
| Thickness                                |                   | -          | micron             | 23.4           | 30   | 36.1 |
| Nominal Yield                            |                   | -          | m <sup>2</sup> /kg | 30.5           | 23.8 | 19.8 |
| F-5                                      | MD                | ASTM D882  | Mpa                | 104            | 104  | 104  |
|  | TD                |            |                    | 98             | 98   | 96   |
| Tensile Strength at Break                | MD                | ASTM D882  | Mpa                | 218            | 208  | 182  |
|  | TD                |            |                    | 247            | 234  | 196  |
| Elongation at Break                      | MD                | ASTM D882  | %                  | 160            | 170  | 170  |
|  | TD                |            |                    | 130            | 130  | 130  |
| Heat Shrinkage<br>(150°C for 30 minutes) | MD                | ASTM D1204 | %                  | 1.4            | 1.4  | 1.2  |
|  | TD                |            |                    | 0.2            | 0.1  | 0.2  |
| Heat Shrinkage<br>(190°C for 5 minutes)  | MD                | ASTM D1204 | %                  | 2.7            | 2.6  | 2.0  |
|  | TD                |            |                    | 0.7            | 0.4  | 0.5  |
| Coefficient of Friction                  | A-side vs. B-side | ASTM D1894 | μ <sub>s</sub>     | 0.4            | 0.4  | 0.4  |
|  |                   |            | μ <sub>D</sub>     | 0.3            | 0.3  | 0.3  |
| Haze (1 sheet)                           |                   | ASTM 1003  | %                  | 2.1            | 2.5  | 2.2  |

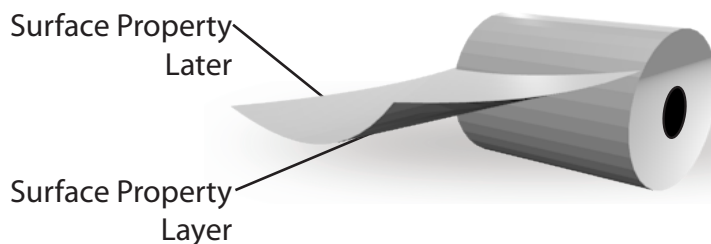
### Key Features

- Co-extruded three layer structure provides low haze and friction
- Low heat shrinkage

### Similar Products

- F7S
- U80
- TA30

### Winding Direction



\* These values do not constitute specific binding specifications

DISCLAIMER: This information is believed to be correct as of the date of issue. Toray Plastics (America), Inc. MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE AND TAKES NO RESPONSIBILITY REGARDING THE SUITABILITY OF THIS INFORMATION FOR THE USER'S INTENDED PURPOSES OR FOR THE CONSEQUENCE OF ITS USE. User is responsible for determining whether the Toray Plastics (America), Inc. product is fit for a particular purpose and suitable for user's method or use of application. Given the variety of factors that can affect the use and application of Toray Plastics (America), Inc. products, which are uniquely within the user's knowledge and control, it is essential that the user make its own tests to determine the safety and suitability of each Toray Plastics (America), Inc. product or product combination for its own purpose.

Lumirror® is a registered trademark of Toray Industries, Inc. for its range of Polyester Films based on Polyethylene Terephthalate (PET).