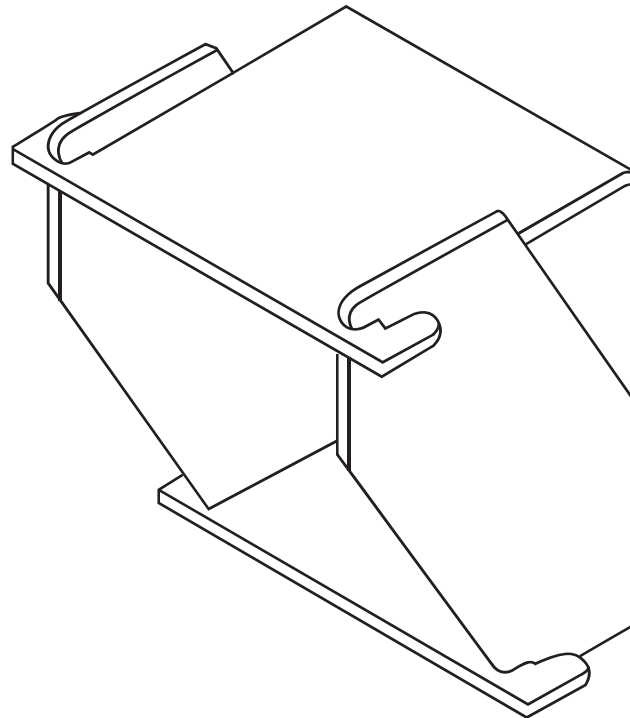
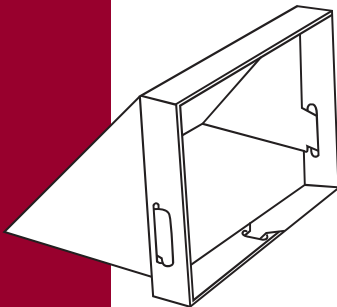
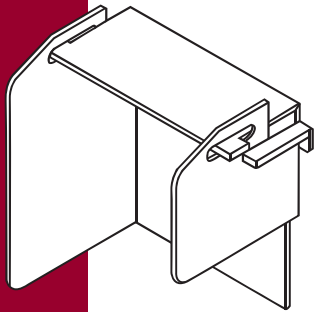
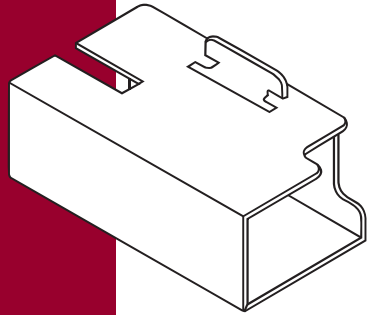


# **ITW** Formex<sup>®</sup>

## **FORMEX™ GS**

**ESD PROTECTION**

**FLAME RETARDANT**



- Flammability Rating UL 94 VTM-0
- H2O Absorption 0.06%
- Temperature Rating 115°C / 239°F
- Dielectric Strength 1,683 Volts / mil @0.010"
- Static Dissipative ESD protection
- UL Recognized File E121855

**For more information or Formex GS samples, please contact us at 630-315-2171.**

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# FORMEX™ GS PRODUCT DATA

## FLAME RETARDANT POLYPROPYLENE SHEET

| TEST METHOD  | FORMEX™ GS-10                              | FORMEX™ GS-17                     | FORMEX™ GS-30                     |
|--|--|-----------------------------------|-----------------------------------|
| Color  | Natural *                                  | Natural *                         | Natural *                         |
| <b>MANUFACTURING SPECIFICATION</b>                 |  |                                   |                                   |
| Thickness  |  |                                   |                                   |
| inches   | 0.010 (+0.003 / -0.0015)                   | 0.017 (+0.003 / -0.001)           | 0.030 (+0.002 / -0.002)           |
| millimeters  | 0.25 (+0.08 / -0.04)                       | 0.43 (+0.08 / -0.03)              | 0.76 (+0.05 / -0.05)              |
| <b>UL FLAMMABILITY RATING / PERFORMANCE LEVELS</b> |  |                                   |                                   |
| Flammability                                       | UL 94                                      | VTM-0                             | V-0                               |
| Relative Temperature Index                         | UL 746B                                    |                                   |                                   |
| Electrical   |  | 115°C / 239°F                     | 115°C / 239°F                     |
| Mechanical Without Impact                          |  | 115°C / 239°F                     | 115°C / 239°F                     |
| High Current Arc Ignition - PLC (arcs to ignite)   | UL 746A                                    | 0                                 | 0                                 |
| High Voltage Arc Tracking - PLC (in / min)         | UL 746A                                    | 0                                 | 0                                 |
| Hot Wire Ignition - PLC (seconds)                  | UL 746A                                    | 4                                 | 4                                 |
| Comparative Tracking Index - PLC                   | ASTM D-3638                                | 0                                 | 0                                 |
| <b>TYPICAL MECHANICAL PROPERTIES VALUES</b>        |  |                                   |                                   |
| Tensile Yield - psi                                | ASTM D-882 / ISO 527-1,-2                  |                                   |                                   |
| Machine Direction                                  |  | 4,400                             | 4,000                             |
| Transverse Direction                               |  | 3,200                             | 3,200                             |
| <b>TYPICAL PHYSICAL PROPERTIES VALUES</b>          |  |                                   |                                   |
| Density - gm / cc                                  | ASTM D-792 / ISO 1183-1, Method A          | 1.035                             | 1.035                             |
| Oxygen Index - %                                   | ASTM D-2863 / ISO 4589--1,-2               | 29                                | 29                                |
| Water Absorption - % Change in weight              | ASTM D-570 / ISO 62, Method 4              | 0.06%                             | 0.06%                             |
| Heat Deflection Temperature at 66 psi              | ASTM D-648 0.45MPa / ISO 75-1,-2, Method B | 121°C / 250°F                     | 121°C / 250°F                     |
| <b>TYPICAL ELECTRICAL PROPERTIES VALUES</b>        |  |                                   |                                   |
| Comparative Tracking Index - volts                 | IEC 60112                                  | 600                               | 600                               |
| Surface Resistivity - ohms / square                | ASTM D-257                                 | 10 <sup>9</sup> -10 <sup>11</sup> | 10 <sup>9</sup> -10 <sup>11</sup> |
| Dielectric Breakdown - volts                       | ASTM D-149 / IEC 60243-1                   | 16,830                            | 19,610                            |
| Dielectric Strength - volts / mil                  | ASTM D-149 / IEC 60243-1                   | 1,683                             | 1,154                             |
| Volume Resistivity - ohm-cm                        | ASTM D-257 / IEC 62631-3-1                 | 8 x 10 <sup>15</sup>              | 8 x 10 <sup>15</sup>              |
| Dielectric Constant                                | ASTM D-150 / IEC 60250, 1MHz               | 2.3                               | 2.3                               |
| Dissipation Factor                                 | ASTM D-150 / IEC 60250, 1MHz               | 0.0019                            | 0.0019                            |
| <b>PACKAGING INFORMATION</b>                       |  |                                   |                                   |
| Standard Configuration                             | Roll                                       | Roll                              | Roll                              |
| Core ID - inches (millimeters)                     | 6 (152)                                    | 6 (152)                           | 6 (152)                           |
| Roll OD - inches (millimeters) (approximate)       | 18 (457)                                   | 18 (457)                          | 18 (457)                          |
| Roll Width - inches (millimeters)                  | 24 (610)                                   | 24 (610)                          | 24 (610)                          |
| Roll Weight - lbs (kgs) (approximate)              | 225 (102.1)                                | 178 (81)                          | 192 (87)                          |
| Length / Roll - feet (meters)                      | 2,000 (609.6)                              | 1,000 (304.8)                     | 600 (182.9)                       |
| Area / Roll - square feet (square meters)          | 4,000 (371.6)                              | 2,000 (185.8)                     | 1,200 (111.5)                     |

Notice: The above data is believed to be accurate and reliable. ITW assumes no responsibility for end-use application, and no performance warranty is expressed or implied. Formex is a registered trademark of ITW. GS is the specific name of our product. Others can not use it without our permission.

\* Side with Logo is Treated side