



Utility Line/Soil Insulation Under Highway Insulation

- ••Economical protection from freezing.
- Reduces frost heave action.
- High compressive strengths.
- •Excellent moisture resistance.
- Resists freeze/thaw

damage.

•Best long-term insulating value.

• Meets or exceeds AASHTO M230-70

PHYSICAL PROPERTIES

BOARD SIZES

| n | Thickness | Width | Length | |
|---|-----------|-------|--------|----------------|
| | 1 1/2" | 24'' | 96'' | Square Edge |
| | 2'' | 24'' | 96'' | Square Edge |

R-VALUES

| | ASTM Test Method | CertiFoam 40 | CertiFoam 60 |
|--|----------------------------|-----------------|-----------------|
| Insulation Properties Thermal Conductivity, k | C 177-76 or C 518-76 | | |
| (Btu/hr. sq. ft. F) 5-Tear Aged (Design) Values | | 0.178 0.185 | 0.178 0.185 |

| @ 25º E | | 0.200 | 0.000 | | 1 1 / 01 | |
|------------------------|-----------|----------------------|----------------------|---|---------------|--------------|
| $@ 25^{\circ}$ F mean | | 0.200 | 0.200 | Mean | 1 1/2" | 2" |
| @ 40° F mean | | 0.102 | 0.102 | Temp. | | |
| $@75^{\circ}$ F mean | | 0.192 | 0.192 | 25° F | 8.4 | 11.2 |
| 6-Month Aged Values | | | | 40° F | 8.1 | 10.8 |
| @ 75° F mean | | | | 75° F | 7.5 | 10.0 |
| | | | | - | , | 1010 |
| Water Resistant | | | | Caution: Like | | |
| Properties | D 2824-69 | 1.0 | 1.0 | materials, CertiFoam brand insulation is combustible and may constitute a fire | | |
| Water Absorption | C 272-76 | < 0.1 | < 0.1 | | | |
| (% by volume) | | | | hazard if imp | - • | |
| Water Vapor | E 96-80 | 1.0 | 1.0 | stored. Altho | 0 | |
| Permeance | | | | retardant add | | 0 |
| (perm) Maximum | | | | from small so exposed to op | , | |
| Mechanical | | | | sources durin | | |
| Properties | | | | installation of | | 0 / |
| Compressive | D 1621-73 | 50 | 70 | of fire and bu | | |
| Strength, (Typical) | | | | followed. | 8 | |
| (lb./sq. in.) | | 40 | 60 | | | |
| Minimum | | | | Caution: Cer | tiFoam brand | l insulation |
| (Specification) | | | | when used ur | der highway | s may cause |
| Value (lb./sq. in.) | | | | differential ic | | |
| Miscellaneous | | | | Products for | | 0 0 |
| Properties | | | | design details | or special ap | plication |
| Maximum | | 165 | 165 | conditions. | | |
| Recommended | | | | | | |
| Use Temperature | | | | | | |
| (°F) | D 696 | 3.5×10^{-5} | 3.5×10^{-5} | | | |
| Linear Coefficient of | | | | | | |
| Thermal Expansion | | | | | | |
| (in./in. °F) | | | | | | |