



Maintaining purity with a "Flux Factor*" of 0.5% or less, Gen-Sil qualifies as an ASTM Type "A" silica brick.

Manufactured in Lehi, Utah

| | GEN-SIL® | GEN-SIL® HD | GEN-SIL® ELITE | GEN-SIL® OF | Insulating Brick |
|--------------------------------|-------------|----------------|-------------------|----------------|----------------------|
| | | | | | GEN-SIL® Lite |
| Chemical Analysis: % | | | | | |
| SiO ₂ | 95.69% | 95.5% | 95.5% | 96.5% | 92.28% |
| Fe ₂ O ₃ | 0.9 | <1.00 | <1.0 | <1.0 | 0.73 |
| TiO ₂ | <0.1 | <0.1 | <0.1 | <0.1 | 0.07 |
| CaO | 3.0 | 3.0 | 3.0 | 2.0 | 5.2 |
| Al ₂ O ₃ | 0.3 | 0.3 | 0.3 | 0.3 | 1.26 |
| MgO | - | - | - | - | - |
| Alkalies | 0.1 | 0.1 | 0.1 | 0.1 | K ₂ O .22 |
| Apparent Porosity: | 20 - 23% | 19 - 22% | 17 - 19% | 18 - 20% | - |
| Bulk Density | | | | | |
| Lb/ft ³ | 112 - 114 | 114 - 116 | 116 - 118 | 115 - 117 | 56 - 62 |
| Mg/m ³ | 1.79 - 1.83 | 1.83 - 1.86 | 1.86 - 1.89 | 1.84 - 1.87 | 0.93 - 0.99 |
| Specific Gravity | | | | | |
| True | 2.34 - 2.37 | 2.34 - 2.37 | 2.32 - 2.36 | 2.32 - 2.36 | - |
| Apparent | 2.31 - 2.34 | 2.30 - 2.34 | 2.29 - 2.33 | 2.29 - 2.33 | - |
| Cold Crushing Strength: | | | | | |
| psi | 3000 - 5000 | 3500 - 5500 | 4000 - 5500 | 4000 - 5000 | - |
| Mpa | 21 - 34 | 24 - 38 | 28 - 34 | 28 - 34 | - |
| Modulus Of Rupture: | | | | | |
| psi | 1000 - 1400 | 1100 - 1500 | 1500 - 2500 | 1500 - 2300 | 235 - 300 |
| Mpa | 6.9 - 9.6 | 7.6 - 10.3 | 10.3 - 13.1 | 10.2 - 13.3 | 1.65 - 2.1 |

The data above is based on average results on production samples. This data is subject to normal variation on individual tests. Therefore, test data can not be assumed as maximum or minimum specifications. ASTM procedures are used where applicable.

* ASTM "Flux Factor" is calculated as the sum of the alumina plus twice the alkalies.

| GEN-SIL® LITE THERMAL CONDUCTIVITY | | | |
|---------------------------------------|-------------------------------|------|----------|
| ° F | Btu•in/hr•ft ² •°F | ° C | (W/m.°C) |
| 500 | 2.5 | 400 | 0.382 |
| 1000 | 3.1 | 600 | 0.479 |
| 1500 | 4.2 | 800 | 0.585 |
| 2000 | 5.4 | 1000 | 0.718 |
| 2500 | 7.2 | 1200 | 0.878 |
| 2800 | 8.4 | 1400 | 1.065 |