

Insulating Fire Bricks

| Properties | | IFB 23-125 | IFB 25-135 | IFB RL 13-11 | IFB 26-140 | IFB 28-150 |
|------------------------------------|------------|---------------------|---------------|-----------------|--------------------------------|---------------|
| Classification | ISO 2245 | 130L | 135 | 135 | 140 | 150L |
| Classification | ASTM C155 | 23 | 25 | | 26 | 28 |
| Classification | | 1300 | 1350 | 1350 | 1400 | 1500 |
| Temperature (°C) | | | | | | |
| Density (g/cm ³) | ISO 5016 | 0,67 | 0,80 | 1,06 | 0,87 | 0,87 |
| Cold Crushing Strength (MPa) | ISO 8895 | 2,0 | 2,5 | 9,0 | 4,7 | 3,5 |
| Permanent Linear Change (%) | ISO 2477 | -0,5 | -0,9 | -0,5 | -0,6 | -0,7 |
| 12h soak at | | 1300°C | 1350°C | 1350°C | 1400°C | 1500°C |
| Linear Thermal Expansion (%) | NF B40 308 | 0.48 | 0.50 | 0.50 | 0.50 | 0.50 |
| Reversible 20-1000°C | | | | | | |
| Thermal Conductivity (W/mk) | ASTM C182 | | | | | |
| Mean Temperature, °C | | | | | | |
| 200 | | 0,18 | 0,20 | 0,28 | 0,28 | 0,28 |
| 400 | | 0,20 | 0,25 | 0,34 | 0,31 | 0,30 |
| 600 | | 0,24 | 0,29 | 0,38 | 0,34 | 0,35 |
| 800 | | 0,27 | 0,32 | 0,42 | 0,36 | 0,37 |
| 1000 | | 0,30 | 0,36 | 0,45 | 0,39 | 0,40 |
| 1200 | | - | - | - | 0,44 | 0,42 |
| Chemical Analysis(%) | XRF | | | | | |
| Al ₂ O ₃ | | 36,0 | 37,0 | 36,0 | 40,0 | 60,0 |
| SiO ₂ | | 56,0 | 56,0 | 57,0 | 54,0 | 37,0 |
| Fe ₂ O ₃ | | 1,1 | 1,3 | 1,3 | 1,2 | 0,8 |
| TiO ₂ | | 0,8 | 1,1 | 1,0 | 1,3 | 0,7 |
| CaO+MgO | | 0,6 | 0,55 | 0,6 | 0,6 | 0,4 |
| Na ₂ + K ₂ O | | 3,2 | 3,5 | 4,0 | 2,6 | 1,0 |
| Dimensional Tolerances | | Standard Pieces | | | Non-Standard Pieces | |
| Length | | ±0.5%, mini ±1.5 mm | | | According to accepted Drawings | |
| Width | | ±0.5%, mini ±1.5 mm | | | | |
| Thickness | | ±0.5%, mini ±1.5 mm | | | | |
| Squaring | | 1 mm / 100mm | | | | |

Physical properties are based on averages of routine quality controls carried out from bricks 230x114x64 mm or 230x114x76 mm. Averages and standard deviations are indicative values, limits (Ti and Th) are guaranteed values.