



Wonder BOARD

Test Summaries & Results

A number of tests have been completed for the manufacturer by the State Fireproof Constructional and Inspection Centre in China. These tests comply with various industry standards.

1. JC688-1998 – Density & Strength

These series of tests determine the Wonder Board properties in relation to the strength of the board. For the purpose of the tests ten (10) 600mm x 600mm 8mm sample were used.

Test items	Standard	Result	Conclusion
Density (in t/cm ³)	≤1.5	1.02	✓ Pass
Water Absorption (as %)	≤28.0	27.3	✓ Pass
Flexural strength (MPa)	≥14.0	14.4	✓ Pass
Pull-out force (MPa)	≥5.0	5.65	✓ Pass
Impact strength, (kj/m ²)	≥1.9	6.22	✓ Pass

2. GB8624-1997 – Fire

a: Fire Proofing

These series of tests determine how fireproof Wonder Board is. This standard employs a grading system to apply to materials tested. For the purpose of the tests six (6) 1200mm x 1200mm 12mm sample were used.

Test items	Standard	Result	Conclusion
Rise in temperature whilst in oven (in °C) Test Mean – GB/T 5464-1999	≤50	1	✓ Pass
Burn Continuously Test Mean – GB/T 5464-1999	≤20	0	✓ Pass
Losing Rate in Quality Test Mean – GB/T 5464-1999	≤50	36.3	✓ Pass

As a result of the above results Wonder Board has been categorized into an **A Grade** product. This is the highest level to be achieved under the standard guidelines.

b: Fire Resistance

This standard assesses the level the amount of heat resistance that the Wonder Board is capable of handling. For the purpose of the tests ten (10) 2440mm x 1220mm 10mm sample were used and heated for 240 minutes (4 hours)

Test items	Standard	Result	Conclusion
Heat Resistance Test Mean – GB/T 9978-1999	Rear - Average ≤140°C or hottest point of ≤180°C	Rear - Average ≤93°C or hottest point of ≤119°C	✓ Pass

After 240 minutes the integrality of the Wonder Board is still good.

3. GB18580-2001 – Formaldehyde Levels

This checks the level of released formaldehyde. For the purpose of the tests three (3) 500mm x 500mm 8mm sample were used.

Test items	Standard	Result	Conclusion
Formaldehyde Release	≤1.5	0.4	✓ Pass

As a result of the above results Wonder Board has a determinant grade of: **E Grade**.

4. GB6566-2001 – Radioactivity

This checks the levels of radioactive materials Radium (Ra), Thorium (Th) and Potassium (K). For the purpose of the tests three (3) 500mm x 500mm 8mm sample were used.

Radioactive Element	Result	Conclusion
Radium (Ra ₂₂₆)	11.4	✓ Pass
Thorium (Th ₂₃₂)	Absent	✓ Pass
Potassium (K ₄₀)	99.0	✓ Pass

Test items	Standard	Result	Conclusion
Internal Irradiation Index	≤1.0	0.1	✓ Pass
External Irradiation Index	≤1.3	0.1	✓ Pass