

Carbon Wave® Energy Saving Sheet (Building Material)

Housing

Jointly developed by OHGI and the Faculty of Science and Technology, Ryukoku University

Energy saving of 50% (winter) and 85% (summer) by using carbon sheet!
Energy saving sheet for buildings and homes.

Patented under application in the USA and China

Just create energy!

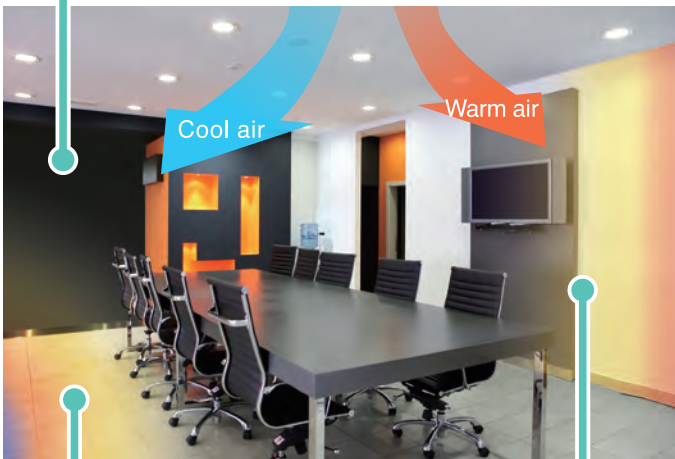
Create an energy efficient office by lining walls in your building with Carbon Wave Sheet.

Just stick it on!

Easy home remodeling with great energy saving.

Partition

No need for installation work. Just place one the floor and you will see the difference - greater efficiency in heating and air-conditioning.



Flooring/ceiling material

Replace at the time of tenant changeover; drive up heating/air-con efficiency.

Wallpaper

Energy saving of 85% air conditioning and 50% of heating

冷房85%、暖房50%効果



炭素シートで節電壁紙
Energy saving wallpaper with a carbon sheet

November 25, 2011 (reported in Chunichi Shimbun, newspaper)



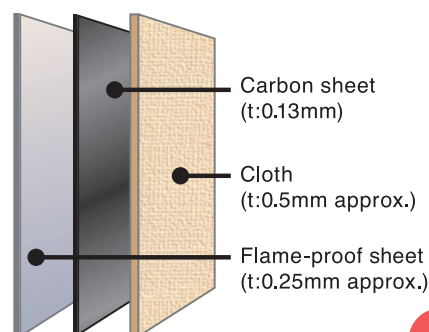
Designated as 2011 Kyoto Eco Style Product



Awarded 2012 Low Carbon Leader Prize

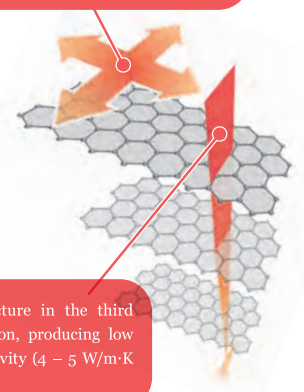
Carbon Wave Sheet: Special Features

- * Provides high insulation and evenness in room temperature
- * Stores heat/coolness effectively
- * Thin and flexible
- * Absorbs substances that cause sick house syndrome
- * Light compared to other insulation materials (175 g/m²)
- * Fireproof (high ignition point)
- * Regulates humidity and prevents condensation.
- * Has deodorizing effect because it is made of carbon powder



Sample cross-section

Hexagonal crystalline structure in two dimensions, producing greater thermal conductivity than aluminium (250 - 300 W/m·K approx.)



Multi-layer structure in the third (height) dimension, producing low thermal conductivity (4 - 5 W/m·K approx.)