

Innovative, high performance, insulated ductwork systems that save energy, cut costs and reduce environmental impact.







- · Rounded ductwork shapes
- · Ultra-smooth internal surface
- Close to zero leakage (Class C at 2,500Pa/10.05 inH20)
- Optimal thermal insulation efficiency



# Lower carbon footprint: Spiralite's component parts have a much lower carbon footprint than steel ductwork with mineral wool insulation. Our ductwork is up to 80% lighter than metal while still very robust and pressure resistant.





Fully compliant: Due to its energy and carbon reduction advantages, this unique, innovative and globally patent protected insulated ductwork is a compliant product under the following environmental assessment programmes: BREEAM, LEED, Estidama and Green Star. It is also an approved green product under the Trustmark (ADQCC) and Future Build (MASDAR) sustainability programmes.

# www.spiraliteductwork.com













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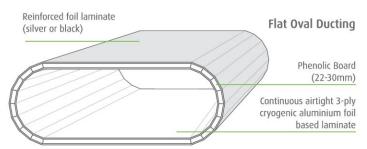
# **Technical Data Sheet**

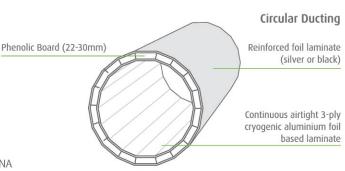
### Insulated circular and flat oval ductwork

Unique and innovative rounded shapes with internal laminate maximize airflow efficiency, robustness and pressure resistance while minimizing pressure drops, friction losses, leakages and energy consumption

### **Key features:**

- · Over 80% lighter than insulated steel ductwork
- Very robust with an extended life span
- All in one ducting and insulation quick and easy to install, significantly reducing labour time on site
- · Highly cost competitive compared to traditional lagged steel ductwork
- · Carbon and energy savings giving optimal BREEAM/LEED credits
- · Class C air leakage at 2,500 Pa rated in BSRIA tests
- Suitable for internal or external use with factory applied weatherproof laminate
- Health and Safety advantages due to lightweight material
- · Can be delivered flat and made up on site, saving time and money
- · Fully recyclable ductwork can be reused or recycled
- · Building design benefits due to reduced weight and space requirements
- Suitable for all air conditioning ductwork, prefabricated mechanical modules and retro fits
- Manufactured and installed in compliance with DW144 (B+ESA 2013), SMACNA and ASHRAE, as applicable





## **Technical Specifications - Phenolic**

| Parameter                                    | Details  |
|--|--|
| Reaction to fire                             | Class 0 (BS476-6); Euroclass B, s1-d0 (BS EN 13501-1)                |
| Flame Spread (FSI) and Smoke Developed (SDI) | FSI of less than 25 and SDI of less than 50 (ASTM E 84 / UL 723)     |
| UL Listing                                   | Listed as Class 1 to Standard for Safety UL181                       |
| Density                                      | 55-60 kg/m3  |
| Compressive strength                         | 200 kPa (EN 826)   |
| Temperature range                            | From -20°C to +80°C  |
| Specific thermal (heat) capacity             | 1470 J/kgK (ref. CIBSE Guide A)                                      |
| Coefficient of thermal conductivity          | 0.022 W/m.K at 10-19°C (BS EN 12667); 0.018W/m.k at 10°c(ASTM C-518) |
| Standard thickness                           | 22 - 30 - 45 mm  |
| Closed cell content                          | Minimum 90% (ISO 4590)   |
| Melting point                                | N/a to thermoset insulation (chars when exposed to extreme heat)     |
| Material Base                                | Phenolic - rigid foam from phenolic resin                            |
| Ozone Depletion Potential (ODP)              | Zero ODP; CFC/HCFC/HFC free; low GWP (Global Warming Potential)      |
| EC Certificate of Conformity                 | EN 14314; see Declaration of Performance                             |
| Building Standard                            | BS EN 13403:2003 Verification for Buildings non-metallic ducts.      |
|  | Ductwork made from Insulation Ductboards                             |
| Quality Management System                    | BS EN ISO 9001:2008  |
| Environment Management System                | BS EN ISO I4001:2004   |
| Occupational Health & Safety Management      | ISO:18001:2007:0HSA  |















