

System Specification and Technical Proposal

We propose to design, manufacture, supply and install a new Nederman low vacuum extraction system for non-corrosive and non-flammable fume from the Thermo-Coupler, comprising of 1no partial enclosure 1200mm wide x 1000mm height x 600mm depth, with 2no spigots and internal task light. The front of the enclosure will be fully open and has been designed with a face velocity >0.5m/s.

From the extraction points appropriately dimensioned and supported galvanised steel smooth bore clipped (QF) ductwork will be installed at high-level back to a single Nederman NF 2.2kW, 3 phase, high volume, high efficiency fan set.

The fan set will be located externally, on the floor, mounted within an acoustic enclosure. The system will discharge the extracted air above roof level with an appropriate sound attenuator and high velocity weatherproof discharge cowl.

Please note that we will not cut holes or make good on the roof, this will need to be done by others. We will work with the roofers internally and we will give instruction on how to mount the discharge cowl and seal.

We will provide a fire damper as part of the installation, manufacturer to be discussed.

A 2.2kW fan control panel including on/off (with light switching) and run/fault signal from fan.

We have not included for any electrical works however we have provided an optional price for this.

Upon completion of the works our commissioning engineer will attend site to certificate the systems in line with current COSHH regulations.

Volume and Utilisation

Size	Description	Quantity	Face Velocity m/s	Airflow m ³ /hr
Ø250mm	Open area 1m x 1.2m	1	>0.5	2160
Total (m³/hr)				1150
Total number of points		1		
Number of points in use		1		
Total running system volume (m³/hr)		2,160		
Inlet duct diameter		250mm		
Inlet duct transport velocity		>10m/s		
Outlet duct diameter		224mm		
Outlet duct transport velocity		>15m/s		
Total system pressure (Pa)		1,900		
Header Transport velocity (m/s)		>10		