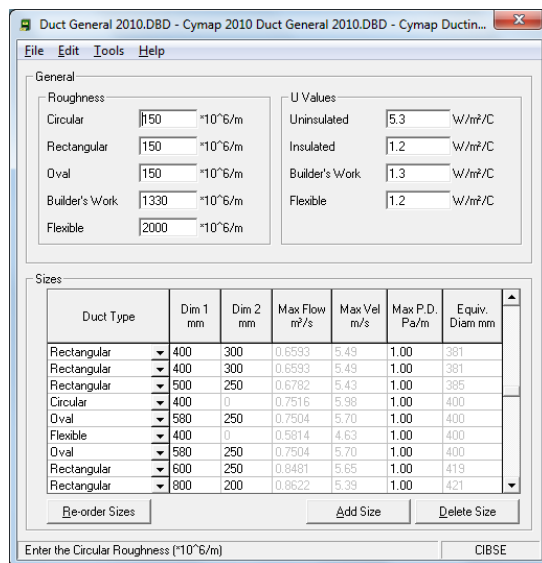


Ductwork Program

Once the Building Energy results have been completed the ductwork routes can be designed and routed on the floor plans using DW 144 standards. All pressure drops, fan duties and data required for submission of calculations can be undertaken.

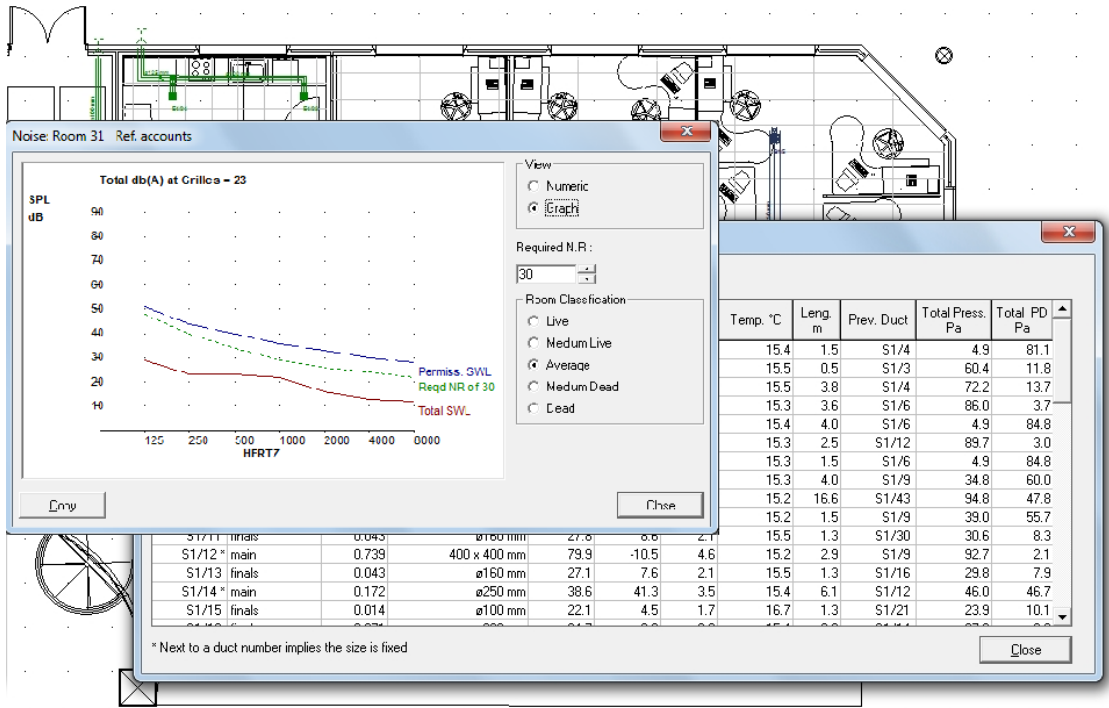
An extensive range of sections, types and sizes of ductwork has been included in a database which can be edited to suit the engineers' input requirements. Selection basis can be velocity, unit pressure drop or volume flow rate for any given size of duct. The unknowns are calculated using industry standard principles.



Ductwork database

Supply and extract grilles and registers can be placed on the layout with a snap on/off function allowing grilles to snap to input ceiling grid positions. Light fittings and electrical items already positioned can be "activated" so their positions can be shown during grille placement.

The selection basis of the grill depends on the system being connected, ie extract from WC areas may be expressed as AC/H but grilles sized for office areas may use cooling flow rates as the basis of calculation. Once the ductwork has been routed back to the AHU entry/exit point and the network of ducts completed, a full schedule of ducts, grille/fan noise, fan duties and branch/duct balancing pressures can be viewed.



Various sections of duct can be edited and designed according to certain rules that can be set up by the engineer, so, for example, ductwork passing through a restricted ceiling void can be set-up with a maximum depth so that any duct the "rule" applies to will be sized on this basis.

Duct Group Details

Reference: branches

Diversity: 100 %

Height Limit: 450 mm

Velocity Limit: 4.0 m/s

Temperature: 21 °C

Shape Choice: Circular

Insulated: No

Class: Calculate

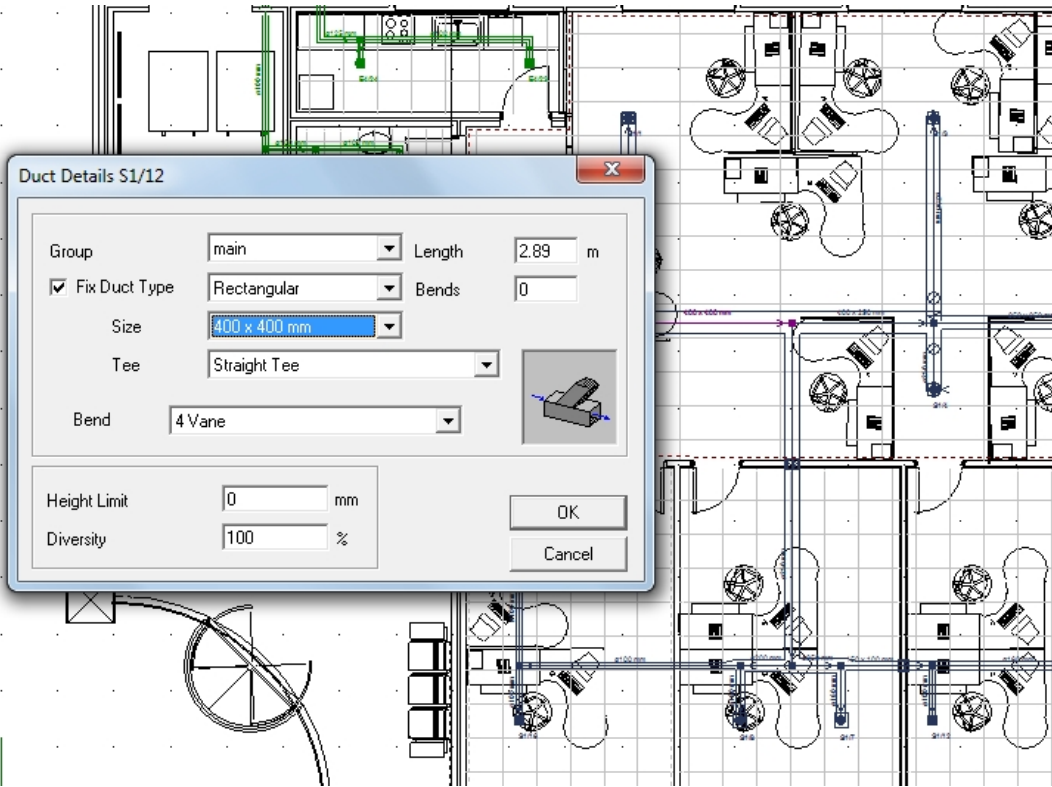
Bend Type: Radius

Tee Type: None

OK Cancel

Duct selection basis

Various duct fittings can be entered with resistances or "K" factors applied as well as being able to edit each section of ductwork. All ductwork fittings have pressure drops and "K" factors associated with them to help perform the build up of total pressure drop of the index ductwork leg, which is identified.



Edit ductwork

Once the layouts are complete they can be transferred to CAD via a DXF plot program where they can be plotted out directly or exported to CAD via DXF format files.

