

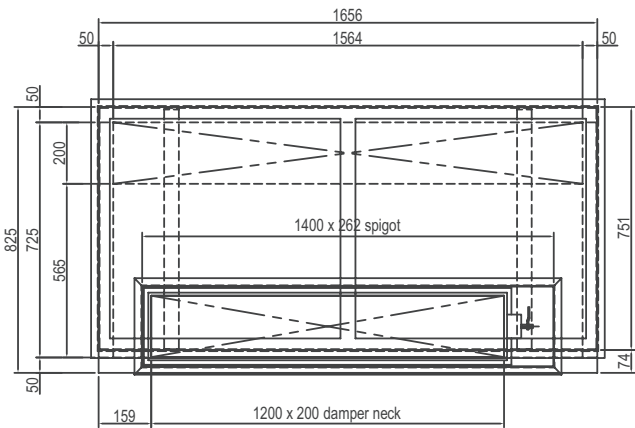
High Attenuation Wall Units

Case Study:

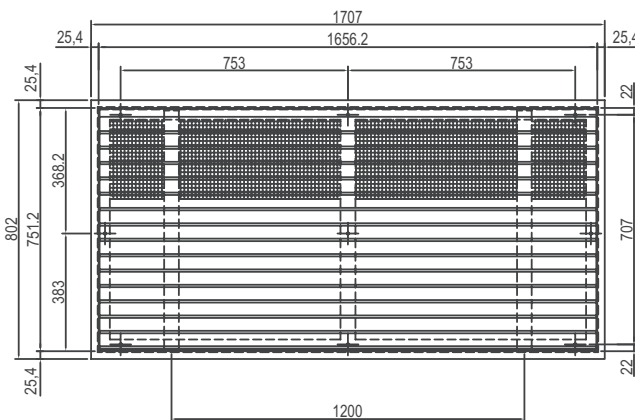
Lakenham School, Norwich

Brief: To design a manually operated wall system with powered extract to the corridor.

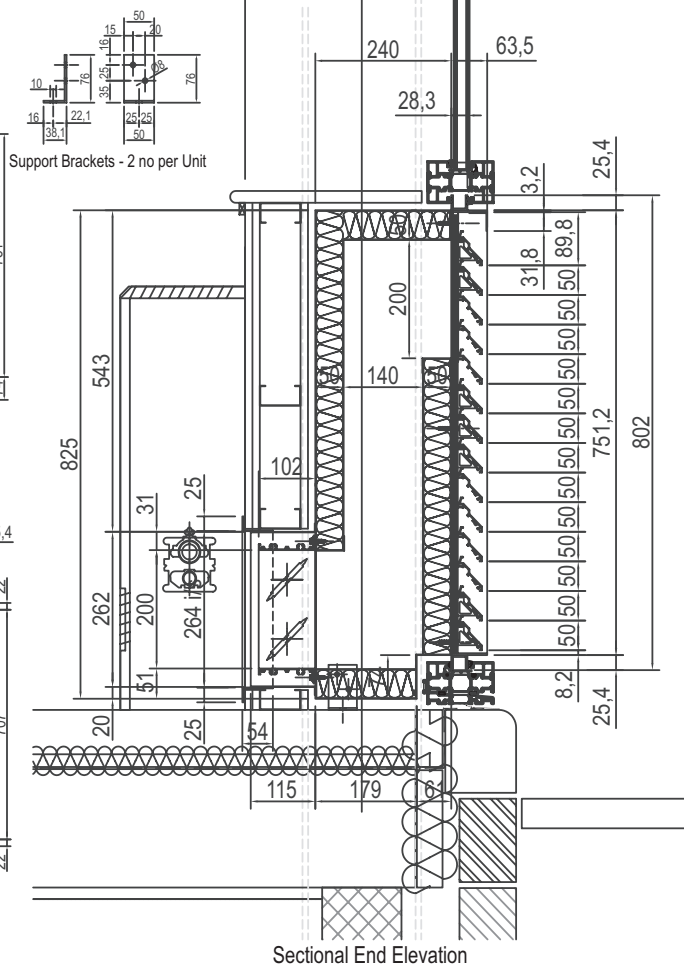
Design: A difficult concept to control the system manually through extensive factory and site testing. A maximum face velocity of 2m/second to provide 8 ltr per person a set of mechanical stops were fitted to limit travel and internal air scoops to catch and divert cold air onto the finned tube LST radiator to promote enhanced radiator performance and avoid drafts. Attenuated and thermally broken dampers to control air movement and noise levels.



Elevation on Rear of Acoustic Plenum



Elevation on Face of Louvre



Sectional End Elevation

General Notes

EL50 Recessed frame weather louvre c/w glazing bead. 50mm blade (CSA145) on 50mm blade pitch. Frame to be constructed from 63.5mm x 38.1mm x 3.2mm aluminium angle c/e 28.3mm x 25.4mm (legs) x 3.2mm Alu channel, all to be "V" prep'd and fully welded. 12 x 12 x 19swg pre galvanised birdmesh to the active louvre area. Pre-drill M8 dia fixing holes to rear of louvre frame to for self drill fixing to acoustic plenum. Removable blades on Nylon support clips (As indicated) to allow external fixing of louvre and acoustic plenum. 1mm thick galvanised mild steel external case, 50mm thick acoustic core with anti migration scrim and expanded metal retaining sheet, double bend acoustic plenum to the rear of the louvre. Thermally broken control damper with a closed U value of 0.53clw hand quadrant control & actuator mounting plate for future control. Supply milled aluminium cloaking frame (loose) for installation after bulk head construction by main contractor.