

## CALM S

*CALM S is a multipurpose acoustic louvre which permits the flow of air while shielding the environment from noise. CALM S is available in three models and a complete range of standard modular sizes. This means that it can satisfy a wide range of performance requirements, especially where space is limited and architectural standards of appearance must be met. Where access is required, CALM S can be supplied as door sets, for inclusion in Colt louvre screens or as stand-alone units. Its linear appearance with superior high frequency performance are suitable for use as mechanical equipment screens, noise barriers, process air intakes, cooling towers inlet silencers and many other applications where attenuation is required.*

*To ensure the most economical solution, noise control must be considered at the earliest possible design stage. Retrofit installation can be significantly more expensive.*

**FEATURES AND BENEFITS**

**SIZES**

CALM is a modular system with each module having the minimum and maximum sizes given below. The modules can be combined to form larger panels.

**CALM S-100**

**Width** - Min 300mm - Max 1800mm  
**Height** - Min 400mm - Max 2400mm  
**Depth** - 102mm  
**Pitch** - 200mm

**CALM S-150**

**Width** - Min 300mm - Max 1800mm  
**Height** - Min 305mm - Max 2135mm  
**Depth** - 152mm  
**Pitch** - 305mm

**CALM S-300**

**Width** - Min 300mm - Max 1800mm  
**Height** - Min 600mm - Max 2400mm  
**Depth** - 300mm  
**Pitch** - 200mm

**Note:**

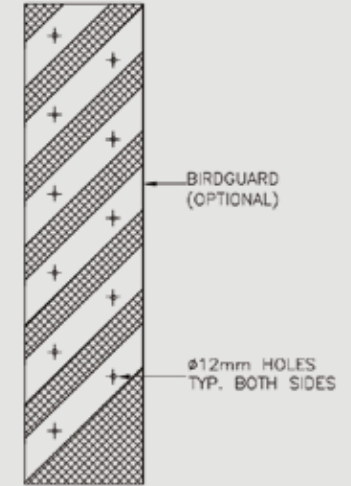
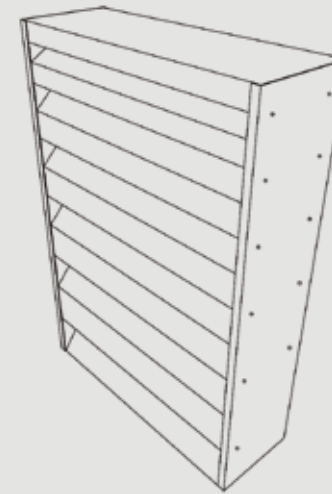
**Width** available in 1mm increments  
**Height** available in 1mm increments

**MATERIAL**

The outer casing and louvre blades are aluminium alloy type 3000 Series. The infill is either organic mineral wool or glass fibre of 47kg/m<sup>3</sup> density and packed under not less than 5% compression to eliminate voids due to settlement. The infill is inert, as well as vermin, rot and moisture proof.

**WEIGHT**

**CALM S-100** 20kg/m<sup>2</sup>  
**CALM S-150** 30kg/m<sup>2</sup>  
**CALM S-300** 60kg/m<sup>2</sup>



**PERFORMANCE DATA**

**Aerodynamic Performance**

| Louvre model      | Static pressure drop Pascals (Pa) |      |      |      |      |      |      |      |      |      |      |      |  |
|-------------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|--|
|                   | 10                                | 20   | 30   | 40   | 50   | 60   | 70   | 80   | 90   | 100  | 150  | 200  |  |
| <b>CALM S-100</b> | 0.92                              | 1.30 | 1.59 | 1.84 | 2.05 | 2.25 | 2.43 | 2.61 | 2.76 | 2.90 | 3.56 | 4.13 |  |
| <b>CALM S-150</b> | 0.53                              | 0.73 | 0.90 | 1.04 | 1.16 | 1.28 | 1.37 | 1.47 | 2.56 | 1.64 | 2.01 | 2.32 |  |
| <b>CALM S-300</b> | 0.94                              | 1.31 | 1.61 | 1.83 | 2.13 | 2.27 | 2.46 | 2.63 | 2.84 | 2.99 | 3.65 | 4.21 |  |

**Transmission Loss (T.L.)** - Defined as the ratio, in decibels, of acoustic energy transmitted through the louvre to that incident upon it.

| Octave Band Centre Frequency (Hz) | Louvre Depth (mm) | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|-----------------------------------|-------------------|----|-----|-----|-----|----|----|----|----|
| <b>CALM S-100</b>                 | 102               | 5  | 4   | 5   | 6   | 9  | 13 | 14 | 13 |
| <b>CALM S-150</b>                 | 152               | 6  | 6   | 8   | 10  | 14 | 18 | 16 | 15 |
| <b>CALM S-300</b>                 | 300               | 6  | 7   | 10  | 12  | 18 | 18 | 14 | 13 |

**Noise Reduction (N.R.)** - The free-field noise reduction of a louvre is the difference, in decibels, between the sound pressure level on the noise source of the louvre and that measured outdoors on the side of the louvre away from the noise source.

| Octave Band Centre Frequency (Hz) | Louvre Depth (mm) | 63 | 125 | 250 | 500 | 1K | 2K | 4K | 8K |
|-----------------------------------|-------------------|----|-----|-----|-----|----|----|----|----|
| <b>CALM S-100</b>                 | 102               | 11 | 10  | 11  | 12  | 15 | 19 | 20 | 19 |
| <b>CALM S-150</b>                 | 152               | 12 | 12  | 14  | 16  | 20 | 24 | 22 | 21 |
| <b>CALM S-300</b>                 | 300               | 12 | 13  | 16  | 18  | 24 | 24 | 20 | 19 |

