

Hebel PowerShield

Complete Fire + Acoustics Solution

With the expansion of residential developments and the consequential reduction in available land, the distance between electrical substations and homes in many locations is shrinking.

Homeowner expectations of 'quiet enjoyment' are increasing and the 100 Hz resonance hum from poorly baffled substations is increasingly leading to homeowner discomfort and in some cases, civil complaints.

After extensive research and acoustic testing, Hebel Australia has developed the Slatted Resonator Wall system that provides a resonant frequency barrier under 150 Hz – far lower than other available systems. Performance down to 100 Hz has also been achieved.

The result is exceptional and predictable acoustic absorption with elimination of resonant noise at very close distances to the source



Acoustic Design & Density

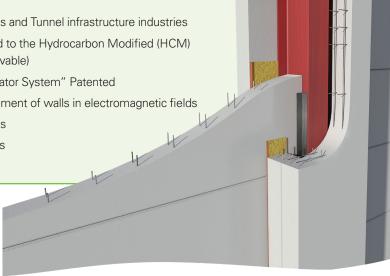
Hebel PowerShield high acoustic performance panels may incorporate the Slated Resonator Wall system by adding a separated layer of Hebel panels as a slatted absorber using steel top hats with a calculated air gap. The system uses Helmholt resonance principals to achieve acoustic absorption at the specific resonant frequency of the project.

PowerShield panels are easily cut to accommodate service penetrations after a wall installation because they have a dry density of 550kg/m³ this is less than one quarter of the density of precast concrete panels.



Benefits

- Developed specifically for the Power, Roads and Tunnel infrastructure industries
- Fire resistance performance when exposed to the Hydrocarbon Modified (HCM) fire curve for 120 minutes (maximum achievable)
- Noise cancelling technology "Hebel Resonator System" Patented
- Non inductive panel capability key requirement of walls in electromagnetic fields
- Lighter, faster modular construction process
- Help reduce risk by protecting critical assets



How to Order PowerShield:

Complete the Hebel Custom order form and email to allhebelorders@csr.com.au

Technical Information

Hydrocarbon Fire Exposure

The Hebel PowerShield system has an established fire resistance performance of 120 minutes when exposed to the Hydrocarbon Modified (HCM) fire curve (Exova Warringtonfire reports: 28255-00 & 27043800).

Cellulosic Fire Exposure

The Hebel PowerShield system has an established fire resistance performance when subject to cellulosic fire exposure as follows: AS 1503.4-2005 FRL = -/240/240 (Exova Warringtonfire Report ref: 24648-02)





