



## **Acoustic Performance**

Moduline panels are available with a wide range of sound-transmission-loss and sound-absorption ratings to accommodate any noise control requirement.

| Moduline Construction Type      | Sound Transmission Loss, dB, by Octave Band Center Frequency, and Sound Transmission Class, STC, Rating |     |     |     |    |    |    |    |     |              |
|---------------------------------|---|-----|-----|-----|----|----|----|----|-----|--------------|
|                                 | 63  | 125 | 250 | 500 | 1k | 2k | 4k | 8k | STC | WT<br>lb/ft² |
| Noishield Regular               | 20  | 21  | 27  | 38  | 48 | 58 | 67 | 66 | 40  | 8            |
| Noishield Septum                | 21  | 19  | 23  | 35  | 50 | 60 | 68 | 72 | 37  | 9            |
| Mill Duty Regular               | 28  | 27  | 28  | 41  | 50 | 57 | 57 | 64 | 43  | 10.5         |
| Noise-Lock I                    | 25  | 27  | 31  | 41  | 51 | 60 | 65 | 66 | 44  | 10           |
| Noise-Lock II & Fire-Noise-Lock | 27  | 30  | 32  | 41  | 50 | 59 | 67 | 71 | 45  | 11           |
| Super-Noise-Lock                | 31  | 34  | 35  | 44  | 54 | 63 | 62 | 68 | 48  | 15           |
| Noishield Hard                  | 22  | 33  | 45  | 52  | 58 | 68 | 75 | 65 | 56  | 9.5          |
| Noise-Lock III                  | 19  | 34  | 55  | 67  | 78 | 83 | 81 | 75 | 58  | 11           |
| Noise-Lock II Hard              | 24  | 40  | 50  | 57  | 65 | 73 | 80 | 78 | 61  | 12           |
| Noise-Lock IV Hard              | 21  | 30  | 50  | 60  | 73 | 79 | 80 | 71 | 62  | 11.3         |
| Gemini Regular                  | 34  | 48  | 58  | 69  | 75 | 82 | 86 | 76 | 70  | 21           |

| Panel Construction Type                                 | Sound Absorption Coefficients at Octave Band Center Frequency, and Noise Reduction Coefficient, NRC |      |      |      |      |      |      |             |  |  |
|---|---|------|------|------|------|------|------|-------------|--|--|
|   | 125   | 250  | 500  | 1k   | 2k   | 4k   | 8k   | NRC         |  |  |
| Noishield Regular                                       | 0.89  | 1.20 | 1.16 | 1.09 | 1.01 | 1.03 | 0.93 | (1.10)/0.95 |  |  |
| Noishield Septum  | 0.50  | 0.68 | 1.03 | 1.05 | 1.00 | 0.99 | _    | (1.10)/0.95 |  |  |
| Noise-Lock I, II, Fire-Noise-Lock<br>& Super-Noise-Lock | 0.94  | 1.19 | 1.11 | 1.06 | 1.03 | 1.03 | 1.04 | (1.10)/0.95 |  |  |
| Noishield Regular with fill protection & spacer         | 0.56  | 0.99 | 1.09 | 0.97 | 0.95 | 0.90 | _    | (1.10)/0.95 |  |  |
| Noise-Lock III  | 0.49  | 0.37 | 0.83 | 0.96 | 0.99 | 1.00 | _    | 0.80        |  |  |
| Noise-Foil I & II (2" - 51 mm thick)                    | 0.35  | 0.65 | 1.20 | 1.21 | 1.07 | 0.92 | _    | 0.95        |  |  |
| Noise-Foil I & II (4" - 102 mm thick)                   | 0.97  | 1.39 | 1.34 | 1.29 | 1.19 | 1.01 | _    | 1.30        |  |  |
| Noise-Foil V  | 0.24  | 0.95 | 1.13 | 0.99 | 0.94 | 0.86 | _    | 1.00        |  |  |



## Fire Resistance Ratings

Fire-Noise-Lock<sup>™</sup> panels ship with UL labels certifying 1-hour (solid side) and 1.5-hour (absorptive side) fire ratings. Doors are certified and ship with UL fire ratings available up to 3 hours.



# **Blast Resistance**

Moduline structures and components can be designed to withstand blast loads, with doors remaining operable after blast — please contact the factory for details.



## Tax Advantages Reduce Cost

Moduline structures qualify in many applications for tax savings associated with accelerated depreciation. Other construction components, such as dry-wall or concrete block do not qualify. Savings with Moduline can amount to 30% - 40% of purchase price. IAC Acoustics recommends consultation with tax or financial advisors on the specifics of each application.



## **Detailed Moduline Application Manual**

Each Moduline Component is fully described in nearly 100 detailed engineering and application data sheets which make up a new expanded edition of the Moduline Application Manual. It provides engineering data including sound transmission loss, sound absorption, sizes, weights, materials of construction, and application information utilized in the design and installation of noise control structures. Request IAC Acoustics' Moduline Application Manual, Bulletin 6.0502 for additional information.