

ANSI S3.19-1974 Attenuation Charts

MSA Helmet-Mounted SoundControl® and left/RIGHT™ Hearing Protection



SoundControl HPE Cap Model



SoundControl EXC Cap Model



SoundControl XLS Cap Model

SoundControl HPE Cap Model (P/N 10061272)

| | NRR | CSA Class | Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 |
|------------------|-----|-----------|-----------------|-----|-----|-----|------|------|------|------|------|------|
| V-GARD® H1 CAP | 25 | A | Mean | 18 | 21 | 29 | 34 | 35 | 39 | 41 | 43 | 42 |
| | | | Std. Dev. (dBA) | 3.1 | 2.6 | 2.6 | 2.5 | 3.0 | 1.5 | 2.8 | 3.2 | 2.9 |
| V-GARD CAP (M) | 27 | A | Mean | 23 | 26 | 31 | 33 | 34 | 38 | 40 | 43 | 43 |
| | | | Std. Dev. (dBA) | 2.6 | 2.6 | 2.5 | 2.2 | 2.6 | 2.6 | 2.0 | 3.7 | 2.4 |
| TOPGARD® CAP | 26 | A | Mean | 23 | 25 | 32 | 34 | 33 | 38 | 40 | 43 | 42 |
| | | | Std. Dev. (dBA) | 2.5 | 3.1 | 3.2 | 2.7 | 2.3 | 3.8 | 2.7 | 4.1 | 3.5 |
| THERMALGARD® CAP | 27 | A | Mean | 24 | 25 | 32 | 33 | 34 | 36 | 40 | 43 | 43 |
| | | | Std. Dev. (dBA) | 2.7 | 3.3 | 2.8 | 2.3 | 1.9 | 2.7 | 2.2 | 3.3 | 3.5 |
| V-GARD 500 CAP | 26 | A | Mean | 23 | 25 | 30 | 34 | 33 | 39 | 40 | 45 | 44 |
| | | | Std. Dev. (dBA) | 3.1 | 3.5 | 2.7 | 2.2 | 2.5 | 3.1 | 2.2 | 3.4 | 2.6 |
| VANGUARD II™ CAP | 26 | A | Mean | 20 | 24 | 32 | 34 | 33 | 38 | 38 | 40 | 41 |
| | | | Std. Dev. (dBA) | 3.4 | 2.9 | 3.1 | 2.8 | 2.2 | 2.3 | 2.1 | 2.7 | 3.3 |

SoundControl EXC Cap Model (P/N 10061230)

| | NCR | CSA Class | Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 |
|-----------------|-----|-----------|-----------------|-----|-----|-----|------|------|------|------|------|------|
| V-GARD CAP (M) | 25 | A | Mean | 18 | 22 | 29 | 32 | 34 | 36 | 39 | 42 | 41 |
| | | | Std. Dev. (dBA) | 2.6 | 2.2 | 2.3 | 2.6 | 2.5 | 3.4 | 3.5 | 4.3 | 3.6 |
| TOPGARD CAP | 24 | A | Mean | 18 | 22 | 28 | 32 | 33 | 35 | 38 | 42 | 41 |
| | | | Std. Dev. (dBA) | 3.8 | 2.9 | 2.6 | 2.7 | 2.2 | 2.7 | 1.5 | 3.8 | 3.7 |
| THERMALGARD CAP | 23 | A | Mean | 16 | 21 | 30 | 32 | 33 | 35 | 39 | 41 | 41 |
| | | | Std. Dev. (dBA) | 2.7 | 2.4 | 2.6 | 3.2 | 4.2 | 3.7 | 4.5 | 3.6 | 3.7 |
| V-GARD 500 CAP | 24 | A | Mean | 16 | 22 | 29 | 32 | 33 | 37 | 39 | 44 | 42 |
| | | | Std. Dev. (dBA) | 3.5 | 3.0 | 3.0 | 2.4 | 2.3 | 2.7 | 2.6 | 3.4 | 3.2 |
| VANGUARD II CAP | 24 | A | Mean | 17 | 21 | 30 | 32 | 33 | 36 | 37 | 39 | 40 |
| | | | Std. Dev. (dBA) | 3.3 | 2.1 | 2.8 | 3.3 | 2.4 | 2.0 | 2.6 | 3.1 | 3.4 |

WE KNOW WHAT'S AT STAKE.

ANSI S3.19-1974 Attenuation Charts



SoundControl SH Full-Brim Model



left/RIGHT (High) Cap Model



left/RIGHT (Medium) Cap Model

SoundControl XLS Cap Model (P/N 10061535)

| | NRR | CSA Class | Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 |
|-----------------|-----|-----------|-----------------|-----|-----|-----|------|------|------|------|------|------|
| V-GARD H1 CAP | 23 | A | Mean | 16 | 19 | 27 | 32 | 35 | 40 | 40 | 39 | 38 |
| | | | Std. Dev. (dBA) | 3.1 | 2.7 | 2.9 | 2.2 | 2.0 | 2.4 | 3.1 | 2.8 | 3.3 |
| V-GARD CAP (M) | 23 | A | Mean | 17 | 22 | 28 | 31 | 33 | 35 | 38 | 40 | 41 |
| | | | Std. Dev. (dBA) | 3.9 | 2.8 | 3.4 | 2.3 | 3.1 | 3.9 | 2.6 | 3.5 | 3.7 |
| TOPGARD CAP | 23 | A | Mean | 18 | 21 | 26 | 31 | 33 | 36 | 39 | 41 | 41 |
| | | | Std. Dev. (dBA) | 3.5 | 2.5 | 2.3 | 3.4 | 2.9 | 3.3 | 3.2 | 3.7 | 4.1 |
| THERMALGARD CAP | 22 | A | Mean | 18 | 20 | 28 | 31 | 33 | 35 | 37 | 41 | 41 |
| | | | Std. Dev. (dBA) | 3.4 | 2.6 | 3.6 | 3.2 | 3.7 | 3.8 | 3.4 | 3.9 | 4.3 |
| V-GARD 500 CAP | 22 | A | Mean | 17 | 21 | 28 | 31 | 33 | 37 | 38 | 41 | 42 |
| | | | Std. Dev. (dBA) | 4.3 | 3.4 | 2.8 | 2.4 | 2.4 | 3.8 | 3.1 | 4.1 | 4.1 |
| VANGUARD II CAP | 23 | A | Mean | 17 | 20 | 29 | 33 | 33 | 37 | 39 | 41 | 41 |
| | | | Std. Dev. (dBA) | 3.5 | 2.7 | 3.2 | 2.5 | 2.8 | 4.4 | 4.1 | 2.5 | 3.6 |

SoundControl SH Full-Brim Model (P/N 10129327)

| | NRR | CSA Class | Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 |
|------------------------------|-----|-----------|-----------------|------|------|------|------|------|------|------|------|------|
| V-GARD SLOTTED FULL-BRIM HAT | 25 | A | Mean | 16.6 | 20.9 | 31.3 | 34.9 | 34.6 | 37.2 | 39.4 | 41.1 | 40.3 |
| | | | Std. Dev. (dBA) | 2.5 | 1.9 | 2.1 | 2.8 | 3.1 | 3.2 | 2.7 | 2.0 | 3.0 |

left/RIGHT (High) Cap Model (P/N 10087422)

| | NRR | CSA Class | Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 |
|-----------------|-----|-----------|-----------------|-----|-----|-----|------|------|------|------|------|------|
| V-GARD H1 CAP | 27 | AL | Mean | 20 | 23 | 33 | 40 | 39 | 38 | 38 | 38 | 39 |
| | | | Std. Dev. (dBA) | 3.5 | 2.2 | 3.1 | 2.4 | 2.8 | 3.3 | 3.7 | 3.5 | 3.3 |
| V-GARD CAP (M) | 28 | AL | Mean | 20 | 26 | 33 | 39 | 38 | 37 | 38 | 40 | 39 |
| | | | Std. Dev. (dBA) | 2.6 | 1.9 | 2.1 | 3.3 | 3.1 | 2.9 | 2.8 | 2.1 | 3.3 |
| TOPGARD CAP | 27 | A | Mean | 19 | 25 | 33 | 37 | 37 | 37 | 36 | 37 | 36 |
| | | | Std. Dev. (dBA) | 2.7 | 2.4 | 2.5 | 3.0 | 2.9 | 2.9 | 2.9 | 2.7 | 3.2 |
| THERMALGARD CAP | 27 | AL | Mean | 20 | 26 | 33 | 36 | 36 | 37 | 37 | 39 | 38 |
| | | | Std. Dev. (dBA) | 3.0 | 2.6 | 3.3 | 3.2 | 2.8 | 2.7 | 2.0 | 3.1 | 3.7 |
| V-GARD 500 CAP | 27 | AL | Mean | 21 | 26 | 34 | 36 | 36 | 37 | 37 | 39 | 39 |
| | | | Std. Dev. (dBA) | 3.8 | 2.5 | 2.8 | 3.1 | 2.3 | 3.1 | 3.1 | 2.9 | 4.0 |
| VANGUARD II CAP | 26 | A | Mean | 19 | 25 | 32 | 36 | 36 | 37 | 37 | 37 | 37 |
| | | | Std. Dev. (dBA) | 3.3 | 2.9 | 3.1 | 3.0 | 2.6 | 2.7 | 2.6 | 3.4 | 2.8 |
| V-GARD CAP (S) | 27 | AL | Mean | 20 | 26 | 33 | 39 | 38 | 37 | 38 | 37 | 38 |
| | | | Std. Dev. (dBA) | 2.4 | 2.5 | 3.2 | 2.8 | 3.7 | 3.0 | 2.6 | 3.0 | 2.7 |
| SUPER-V CAP | 27 | AL | Mean | 20 | 26 | 33 | 37 | 37 | 38 | 36 | 39 | 38 |
| | | | Std. Dev. (dBA) | 2.9 | 3.1 | 3.1 | 2.8 | 3.4 | 2.8 | 2.2 | 3.4 | 3.9 |

left/RIGHT (Medium) Cap Model (P/N 10087429)

| | NRR | CSA Class | Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 |
|-----------------|-----|-----------|-----------------|-----|-----|-----|------|------|------|------|------|------|
| V-GARD H1 CAP | 23 | A | Mean | 15 | 19 | 28 | 38 | 38 | 38 | 36 | 35 | 37 |
| | | | Std. Dev. (dBA) | 3.1 | 2.3 | 3.0 | 3.5 | 3.0 | 2.7 | 3.2 | 3.2 | 4.1 |
| V-GARD CAP (M) | 25 | A | Mean | 17 | 22 | 29 | 36 | 37 | 39 | 38 | 40 | 39 |
| | | | Std. Dev. (dBA) | 3.0 | 2.2 | 2.1 | 3.1 | 3.3 | 2.8 | 2.9 | 3.8 | 4.4 |
| TOPGARD CAP | 24 | A | Mean | 15 | 21 | 29 | 35 | 35 | 38 | 39 | 38 | 38 |
| | | | Std. Dev. (dBA) | 2.9 | 2.7 | 2.6 | 3.4 | 3.0 | 3.4 | 2.9 | 3.3 | 3.6 |
| THERMALGARD CAP | 24 | A | Mean | 18 | 23 | 29 | 33 | 35 | 38 | 37 | 39 | 39 |
| | | | Std. Dev. (dBA) | 3.9 | 3.1 | 2.7 | 3.1 | 3.1 | 3.5 | 3.6 | 3.4 | 3.4 |
| V-GARD 500 CAP | 24 | A | Mean | 17 | 23 | 29 | 35 | 37 | 40 | 39 | 40 | 39 |
| | | | Std. Dev. (dBA) | 3.8 | 3.3 | 2.8 | 2.4 | 2.6 | 3.2 | 3.1 | 3.4 | 4.4 |
| VANGUARD II CAP | 24 | A | Mean | 16 | 20 | 29 | 34 | 35 | 37 | 35 | 38 | 37 |
| | | | Std. Dev. (dBA) | 2.7 | 2.4 | 2.3 | 2.9 | 3.2 | 3.1 | 2.2 | 3.9 | 3.7 |
| V-GARD CAP (S) | 24 | A | Mean | 17 | 21 | 29 | 36 | 35 | 38 | 39 | 38 | 39 |
| | | | Std. Dev. (dBA) | 3.4 | 3.0 | 2.8 | 3.1 | 2.6 | 2.7 | 3.0 | 3.6 | 3.5 |
| SUPER-V CAP | 24 | A | Mean | 16 | 21 | 30 | 35 | 36 | 39 | 36 | 39 | 39 |
| | | | Std. Dev. (dBA) | 2.0 | 2.8 | 3.3 | 3.3 | 3.3 | 2.6 | 3.5 | 5.0 | 4.7 |



left/RIGHT (Low) Cap Model

left/RIGHT (Low) Cap Model (P/N 10087439)

| | NRR | CSA Class | Frequency (Hz) | 125 | 250 | 500 | 1000 | 2000 | 3150 | 4000 | 6300 | 8000 |
|-----------------|-----|-----------|-----------------|-----|-----|-----|------|------|------|------|------|------|
| V-GARD H1 CAP | 21 | B | Mean | 12 | 16 | 23 | 35 | 33 | 33 | 33 | 34 | 32 |
| | | | Std. Dev. (dBA) | 2.2 | 2.1 | 2.5 | 2.5 | 2.2 | 2.6 | 2.4 | 1.8 | 1.7 |
| V-GARD CAP (M) | 21 | B | Mean | 14 | 17 | 25 | 31 | 32 | 33 | 35 | 35 | 35 |
| | | | Std. Dev. (dBA) | 2.9 | 2.8 | 2.3 | 3.0 | 2.8 | 2.4 | 2.1 | 2.8 | 2.7 |
| TOPGARD CAP | 21 | B | Mean | 14 | 17 | 25 | 32 | 31 | 33 | 36 | 35 | 34 |
| | | | Std. Dev. (dBA) | 3.5 | 2.8 | 2.1 | 3.0 | 3.1 | 2.0 | 2.6 | 2.5 | 2.6 |
| THERMALGARD CAP | 21 | B | Mean | 15 | 18 | 26 | 31 | 32 | 32 | 35 | 35 | 35 |
| | | | Std. Dev. (dBA) | 3.2 | 2.9 | 2.4 | 2.9 | 2.3 | 2.6 | 3.5 | 3.0 | 2.6 |
| V-GARD 500 CAP | 21 | B | Mean | 15 | 20 | 25 | 32 | 32 | 32 | 35 | 36 | 35 |
| | | | Std. Dev. (dBA) | 2.7 | 3.1 | 2.6 | 2.5 | 2.5 | 3.1 | 3.6 | 2.7 | 3.7 |
| VANGUARD II CAP | 20 | B | Mean | 13 | 17 | 25 | 30 | 30 | 32 | 34 | 35 | 35 |
| | | | Std. Dev. (dBA) | 3.0 | 2.4 | 3.0 | 3.0 | 2.6 | 2.5 | 2.1 | 3.0 | 2.9 |
| V-GARD CAP (S) | 21 | B | Mean | 15 | 19 | 37 | 33 | 31 | 31 | 35 | 35 | 34 |
| | | | Std. Dev. (dBA) | 3.7 | 2.8 | 3.0 | 3.7 | 3.0 | 2.3 | 3.2 | 2.8 | 2.9 |
| SUPER-V CAP | 20 | B | Mean | 14 | 17 | 25 | 32 | 32 | 33 | 35 | 36 | 35 |
| | | | Std. Dev. (dBA) | 2.8 | 2.7 | 2.9 | 3.5 | 3.4 | 3.0 | 2.7 | 2.5 | 3.4 |

Note: This Bulletin contains only a general description of the products shown. While product uses and performance capabilities are generally described, the products shall not, under any circumstances, be used by untrained or unqualified individuals. The products shall not be used until the product instructions/user manual, which contains detailed information concerning the proper use and care of the products, including any warnings or cautions, have been thoroughly read and understood. Specifications are subject to change without prior notice.

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