



March 14, 2023

**RE: ANSI 250.4 Physical Endurance Levels of Doors & Frames and ANSI 250.8 SDI Classifications**

MPI has successfully tested both of our door product lines to the ANSI 250.4 standards at Intertek Testing Labs and the results are as follows.

**Polystyrene Doors (#3195456MID-002):** tested a 18 gauge door to 1 million cycles, with 0.818" max deflection with 300lb load applied, and 0.044" permanent deflection after load released to successfully pass Performance Level A using a Level 2 (18 gauge door) with no restriction of Model seam.

**Steel Stiffen Doors (#WHI-495-SP-0631):** tested a 16 gauge door to 4 million cycles (3 million beyond the test standard). At the highest testing standard of 1 million cycle testing, max deflection of 0.210" with 300lb load applied and 0.010" permanent deflection after the load is removed to successfully pass Performance Level A using a Level 3 (16 gauge door) with no restriction of Model seam. As indicated above the testing continued after recording the 1 million cycle until they reached 4 million cycles and they documented max deflection of 0.354" with 300lb load applied and 0.011" permanent deflection after removing the load, due to the testing standard only coving to Performance Level A this part of the test didn't yield any additional performance levels and was for informational purposes only.

**ANSI 250.8 Section 2.04 (not a testing standard)**

Level 1 – 0.032" (20 gauge) Door

Level 2 – 0.042" (18 gauge) Door

Level 3 – 0.056" (16 gauge) Door

Level 4 – 0.067" (14 gauge) Door

**ANSI 250.8 Section 2.04 (not a testing standard)**

Model 1 – Open Seam Door Edge

Model 2 – Seamless Door Edge

**ANSI 250.4 Section 5 (cycle testing), 6 (twist testing), & 7 (acceptance criteria)**

Performance Level A – Max Deflection of 1 ¼" at 300lb load and 1 million cycles

Performance Level B – Max Deflection of 1 ¼" at 300lb load and 500 thousand cycles

Performance Level C – Max Deflection of 2 ½" at 300lb load and 250 thousand cycles

\*Max 1/8 permanent deflection for any performance level once the load is removed (ANSI 250.4 Section 7.1.8)

Please contact us if additional information is needed.

Very truly yours,

David McConnell  
Products and Services Manager