Specifications Overview*

**Mil Specifications:**
- A-A-59588  New commercial description overview for silicone rubber items
- ZZR765 Class 1  Extreme low temperature phenyl base silicone
- ZZR765 Class 2  General purpose, low compression set methyl-vinyl silicone
- ZZR765 Class 3  High flex, high tear strength grades of methyl-vinyl silicone
- Mil-R-6130  See ASTM D6576 (below)

**AMS Specifications:**
- AMS 3301  General purpose, 40 durometer silicone
- AMS 3302  General purpose, 50 durometer silicone
- AMS 3303  General purpose, 60 durometer silicone
- AMS 3304  General purpose, 70 durometer silicone
- AMS 3323  Fluorosilicone Sponge, closed cell
- AMS 3347  High strength, 50 durometer silicone rubber
- AMS 3348  High strength, 30 durometer silicone rubber
- AMS 3349  High strength, 70 durometer silicone rubber

**UL Flammability Specifications:**
- UL 94 HB  Horizontal Burn Test - slow burning on a horizontal swatch
- UL 94 V-0  Vertical Burn Test - burning stops within 10 seconds on a vertical swatch, no drips allowed
- UL 94 V-1  Vertical Burn Test - burning stops within 30 seconds on a vertical swatch, no drips allowed

**IP Enclosure Specifications:**
- IP 5X (solids)  First Digit  Complete protection (Dust protected)
- IP 6X (solids)  First Digit  Complete protection (Dust proof)
- IP X0 (water)  Second Digit  No special protection required
- IP X1 (water)  Second Digit  Water dripping/falling vertically (light rain)
- IP X2 (water)  Second Digit  Water sprayed at an angle, up to 15° degrees from the vertical (light rain and wind)
- IP X3 (water)  Second Digit  Spray water, any direction up to 60° degrees from the vertical (Heavy rain)
- IP X4 (water)  Second Digit  Spray water from all directions, limited ingress permitted
- IP X5 (water)  Second Digit  Low pressure water jets from all directions, limited ingress permitted (Hose down, non-commercial)
- IP X6 (water)  Second Digit  High pressure jets from all directions, limited ingress permitted (Hose down, commercial)
- IP X7 (water)  Second Digit  Temporary immersion, 15 cm to 1m (Shallow immersion)

**Examples:**
- IP 66, IP66  Dust-proof, high pressure jets from all directions
- IP 67, IP67  Dust-proof, temporary immersion (shallow, up to 1m)
- IP 68, IP68  Dust-proof, permanent immersion, under pressure
**NEMA Enclosure Specifications:**

NEMA Type 1  General purpose indoor use, no special protection.
NEMA Type 2  Indoor use, protection against limited amounts of falling water and debris.
NEMA Type 3  Outdoor use, to protect against windblown dust, rain, and sleet. To be unaffected by development of ice.
NEMA Type 3R Outdoor use, to protect against falling rain. To be unaffected by development of ice.
NEMA Type 3S  Outdoor use, to protect against sleet. To be unaffected by development of ice.
NEMA Type 4  Indoor or outdoor use, to protect against windblown dust and rain, splashing water, and hose down. To be unaffected by development of ice.
NEMA Type 4X  Similar to Type 4, plus protection against corrosion.
NEMA Type 6  Indoor or outdoor use, to protect against entry of water during temporary, shallow submersion. To be unaffected by development of ice.

**ASTM Specifications:**

ASTM D6576  New designation for cellular materials, replaces Mil-R-6130
ASTM D1056 Type 1  Open cell sponge rubber
ASTM D1056 Type 2  Closed cell sponge rubber
ASTM D1056 Class A  Non-oil resistant
ASTM D1056 Class B  Oil resistant, low swell
ASTM D1056 Class C  Oil resistant, medium swell
ASTM D1056 Class D  Extreme temperature resistance
ASTM D1056 Grade 0  Compression Force Deflection less than 2 psi
ASTM D1056 Grade 1  Compression Force Deflection = 2 - 5 psi
ASTM D1056 Grade 2  Compression Force Deflection = 5 - 9 psi
ASTM D1056 Grade 3  Compression Force Deflection = 9-13 psi (for classes A, B, C) 9-15 psi (for class D)
ASTM D1056 Grade 4  Compression Force Deflection = 13-17 psi (for classes A, B, C) 15-22 psi (for class D)
ASTM D1056 Grade 5  Compression Force Deflection = 17-25 psi (for classes A, B, C) 22-30 psi (for class D)
ASTM D1056 Test Suffix  A - Heat resistance
ASTM D1056 Test Suffix  B - Compression set
ASTM D1056 Test Suffix  C - Ozone or weather resistance
ASTM D1056 Test Suffix  D - Compression deflection resistance
ASTM D1056 Test Suffix  E - Fluid resistance (Fuel B)
ASTM D1056 Test Suffix  F - Low temperature resistance
ASTM D1056 Test Suffix  G - Tear resistance
ASTM D1056 Test Suffix  J - Abrasion resistance
ASTM D1056 Test Suffix  K - Adhesion resistance
ASTM D1056 Test Suffix  L - Water absorption
ASTM D1056 Test Suffix  M - Flammability resistance
ASTM D1056 Test Suffix  N - Impact resistance
ASTM D1056 Test Suffix  P - Staining resistance
ASTM D1056 Test Suffix  R - Resilience
ASTM D1056 Test Suffix  T - Tensile and Elongation
ASTM D1056 Test Suffix  W - Density
ASTM D1056 Test Suffix  Z - Any special requirements

* Specification Overview is for reference only, refer to the actual specification for details and updated information*