

## 12”-60” (300-1500 mm) HDPE PER ASTM F2648 RESIN PROPERTIES DETAIL

This document provides the cell classification and respective material properties in accordance with ASTM D3350-14 for the high-density polyethylene resin used for productions of 12”-60” (300-1500 mm) ADS N-12® dual wall pipe meeting the requirements of ASTM F2648 (perforated and non-perforated).

Cell Classification per ASTM D3350-14: **435420C**

| Cell Class Number | Property                           | Test Method | Units   | Value                                 |
|-------------------|------------------------------------|-------------|---|---------------------------------------|
| 4                 | Density                            | ASTM D1505  | g/cm <sup>3</sup>   | >0.947-0.955                          |
| 3                 | Melt Index                         | ASTM D1238  | g/10min   | <0.4-0.15                             |
| 5                 | Flexural Modulus                   | ASTM D790   | psi (MPa)   | 110,000 to <160,000<br>(758 to <1103) |
| 4                 | Tensile Strength                   | ASTM D638   | psi (MPa)   | 3,000 to <3,500<br>(21 to <24)        |
| 2                 | Slow Crack Growth Resistance, ESCR | ASTM D1693  | Test condition, 100% Igepal<br>Test duration, hours<br>Failure, max | B<br>24<br>50%                        |
| 0                 | Hydrostatic Design Basis           | ASTM D2837  | psi (MPa)   | Not pressure rated                    |
| C                 | Color and UV Stabilizer            | ASTM D3350  | -   | Black; Minimum 2%<br>Maximum* <4%     |

\* Not specified in ASTM D3350; requirement per ASTM F2648.