References

SUMMARY OF CURRENT STANDARD SPECIFICATIONS USED IN THIS HANDBOOK

AASHTO STANDARDS

American Association of State Highway and Transportation Officials Standards

LRFD Section 12 – Buried Structures and Tunnel Liners

M43 – Sizes of Aggregate for Road and Bridge Construction

M190 – Bituminous-Coated Corrugated Metal Culvert Pipe and Pipe-Arches

M218 – Steel Sheet, Zinc-Coated (Galvanized), for Corrugated Steel Pipe

M245 – Corrugated Steel Pipe, Polymer-Precoated, for Sewers and Drains

M252 – Corrugated Polyethylene Drainage Pipe

M274 – Steel Sheet, Aluminum-Coated (Type 2), for Corrugated Steel Pipe

M289 – Aluminum-Zinc Alloy Coated Sheet Steel for Corrugated Steel Pipe

M294 – Corrugated Polyethylene Pipe, 300- to 1500-mm Diameter

M330 – Polypropylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter

Section 26 – Metal Culverts

Section 30 – Thermoplastic Pipe

ASTM STANDARDS

American Society for Testing and Materials Standards

A536-84 – Ductile Iron Castings

A924 – General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process

C969 – Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines

D737 – Air Permeability of Textile Fabrics

D1056 – Flexible Cellular Materials – Sponge and Expanded Rubber

D1117 – Test Methods for Nonwoven Fabrics

D1149 – Rubber Deterioration – Surface Ozone Cracking in a Chamber

D1248-98 – Polyethylene Plastics Extrusion Materials for Wire and Cable

D2321 – Underground Installation for Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications

D2412 – Determination of External Loading Characteristics of Plastic Pipe by Parallel-Plate Loading

D2487 – Classification of Soils for Engineering Purposes

D3034 – Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings

D3212 – Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals

D3350 – Polyethylene Plastics Pipe and Fittings Materials

D3786 – Hydraulic Bursting Strength of Textile Fabrics – Diaphragm Bursting Strength Tester Methods

D4101 – Polypropylene Injection and Extrusion Materials

D4355 – Deterioration of Geotextiles by Exposure to Light, Moisture and Heat in a Xenon Arc Type Apparatus

D4491 – Water Permeability of Geotextiles by Permittivity

D4533 – Trapezoid Tearing Strength of Geotextiles

D4632 – Grab Breaking Load and Elongation of Geotextiles

D4751 – Determining Apparent Opening Size of a Geotextile

D4833 – Index Puncture Resistance of Geotextiles, Geomembranes, and Related Products

D5034 – Breaking Strength and Elongation of Textile Fabrics (Grab Test)

D5199 – Measuring Nominal Thickness of Geotextiles and Geomembranes

D5261 – Measuring Mass per Unit Area of Geotextiles

F477 – Elastomeric Seals (Gaskets) for Joining Plastic Pipe

F481 – Installation of Thermoplastic Pipe and Corrugated Pipe in Septic Tank Leach Fields

F667 – Large Diameter Corrugated Polyethylene Pipe and Fittings

F679 – Poly(Vinyl Chloride) (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings

F794 – Poly(Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter

F810 – Smoothwall Polyethylene (PE) Pipe for Use in Drainage and Waste Disposal Absorption Fields

F949 – Poly(Vinyl Chloride) (PVC) Corrugated Sewer Pipe With a Smooth Interior and Fittings

F1336 – Specification for Poly(Vinyl Chloride) (PVC) Gasketed Sewer Fittings

F1417 – Installation Acceptance of Plastic Gravity Sewer Lines Using low-Pressure Air

F2306 – 12 to 60in. Annular Corrugated Profile-Wall Polyethylene (PE) Pipe and Fittings for Gravity-Flow Storm Sewer and Subsurface Drainage Applications

F2487 – Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Corrugated High Density Polyethylene Pipelines

F2649 – Standard Specification for Corrugated High Density Polyethylene (HDPE) Grease Interceptor Tanks

F2737 – Standard Specification for Corrugated High Density Polyethylene (HDPE) Water Quality Units

F2762 – 12 to 30 in. [300 to 750 mm] Annular Corrugated Profile-Wall Polyethylene (PE) Pipe and Fittings for Sanitary Sewer Applications

F2764 – 6 to 60 in. [300 to 1500 mm] Polypropylene (PP) Corrugated Double and Triple Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications

F2881 – 12 to 60 in. [300 to 1500 mm] Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications

F3058 – Standard Practice for Preliminary Field Testing of Thermoplastic Pipe Joints for Gravity Flow (Non-Pressure) Sewer Lines

CSA STANDARDS

B182.8-11 – Profile Polyethylene (PE) Storm Sewer and Drainage Pipe and Fittings

B182.11-11 – Standard practice for the installation of thermoplastic drain, storm, and sewer pipe and fittings

B182.13-11 – Profile Polypropylene (PP) Sewer Pipe and Fitings for leak-proof sewer applications

BNQ STANDARDS

1809-300/2007 – General Technical Specifications – Drinking Water And Sewer Lines

3624-110/2006 – Polyethylene (PE) Pipe Fittings- Semi-Rigid or Flexible Pipes for Surface Water Evacuation, Soil, Drainage and Culverts- Characteristics and Test Methods

3624-115/2007 – Polyethylene (PE) Pipe and Fittings- Flexible Pipes For Drainage- Characteristics and Test Methods

3624-120 – Polyethylene (PE) Pipe and Fittings- Smooth Inside Wall Open Profile Pipes for Storm Weser and Soil Drainage- Characteristics and Test Methods

3624-913-2013 – Polypropylene (PP) Pipe and Fittings- Certification Protocol

COE STANDARDS

US Army Corp of Engineer Standards

02215-86 – Geotextiles Used as Filters

IAPMO STANDARDS

International Association of Plumbing and Mechanical Officials Standards

PS63-2004a – Plastic Leaching Chambers

SCS STANDARDS

Soil Conservation Service Standards

606 – Subsurface Drain

The following reference material may prove helpful in gaining additional information on polyethylene and storm drainage systems.

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