## **ROOF SPECIALTIES ROOF DRAINS Specification**

Note: This roof drains specification, with minor editing, has been written as a separate section of work. Alternatively, the appropriate clauses may be incorporated as part of a roofing specification.

#### PART 1 GENERAL

- 1.01 SECTION INCLUDES
  - A. Supply and installation of roof accessories, including: 1. Roof drains.
- 1.02 RELATED SECTIONS
  - A. Section 07200 Thermal Protection

Note: Urethane insulation air/vapour barrier protection is recommended for depth of deck Where drains penetrate the roof deck, to eliminate cold spots and prevent ice build-up in winter and moisture dripping to space below.

- B. Section 07500 Membrane Roofing
- C. Section 15413 Drainage Waste and Vent Piping Cast Iron and Copper
- D. Section 15414 Drainage Waste and Vent Piping Plastic

#### 1.03 REFERENCES

- [A. ANSI A112.21.2 Roof Drains]
- [B. CRCA (Canadian Roofing Contractor's Association)]
- [C. NRCA (National Roofing Contractor's Association)]
- [D. SPRI (Single Ply Roofing Institute)]
- [E. CUFCA (Canadian Urethane Foam Contractor's Association) and CGSB-51-GP 46MP Manual for "Installers of Spray Polyurethane Foam Thermal Insulation" and ASTM C1029-90 "Spray Applied Rigid Cellular Polyurethane Thermal Insulation"]

#### 1.04 SUBMITTALS

- A. Manufacturer's descriptive literature for each product, including section or other type details.
- B. Manufacturer's written installation instructions.

C.Shop drawings and samples, when required, in accordance with Section [01300]. Indicate drain size, type and location of tapered insulation sumps as applicable.

#### .5 QUALITY ASSURANCE

Roof accessories manufacturer to have minimum 5 year documented experience in the design and fabrication of roofing specialties and accessories.

#### 1.06 SPECIAL WARRANTY

A. Warrant products installed under this section of work to be free of leaks and defects in materials and/or manufacture for a period of 20 years when installed in accordance with the manufacturer's written instructions.

#### **PART 2 PRODUCTS**

#### 2.01 MANUFACTURER

- A. Provide products as manufactured by Thaler Metal Industries, 1-800-387-7217 (Mississauga, Ontario, Canada) or 1-800-576-1200 (Niagara Falls, NY) or provide equal products by another manufacturer approved in advance by the [Architect], based upon:
  - 1. 20 year warranty against leaks and defects in materials and/or manufacture, as applicable;
  - 2. compliance with ANSI A112.21.2 Roof Drains standard;
  - 3. maintenance free design;
  - 4. materials and sizes options, and thicknesses;
  - drain options available i.e. sediment collar, flow control accessory, treated deck flange, copper annealed expansion outlet, EPDM outlet-to-leader retrofit seal, stainless steel under-deck clamp, brass or aluminum ferrules;
  - 6. availability of engineered flow chart data where required for metered drainage;
  - 7. use of EPDM outlet-to-leader gasket for retrofit drains, as applicable;
  - 8. written installation instructions.

#### 2.02 GENERAL

A. This section to be read in conjunction with Sections [07\_\_\_\_] and [15\_\_\_\_].

#### 2.03 MANUFACTURED UNITS

Note: Delete clauses not applicable.

### RD-1C Vandalproof Copper Roof Drain (All Purpose, Expansion Outlet)

A Roof drains: Thaler RD-1C drain for [3" (76 mm)] [4" (102 mm)] [6" (152 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate clamped directly to drain body; 24 oz. 032" (0.831 mm) spun copper pan-formed drain body, deck flange and expansion outlet with: copper ferrule; 3/8" (9 mm) s.s. bolts welded to drain body; bronze stabilizer ring; cast aluminum under-deck clamping ring; [T-5 copper sediment collar;] [perforated 22 ga. (0.76 mm) s.s. ballast guard;] [T-7 aluminum flow control accessory;] [PVC coated deck flange] [bituminous painted deck flange].

*RD-4A Vandalproof Aluminum Roof Drain (All Purpose, Straight Outlet)* 

Note: Edit specification clause to reflect choice of copper (RD-4C) or stainless steel (RD-4SS) roof drain in lieu of aluminum if desired.

**B.** Roof drains: Thaler RD-4A drain for [3" (76 mm)] [4" (102 mm)] [6" (152 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate clamped directly to drain body; .090" (2.3 mm) pan-formed aluminum drain body, deck flange and straight aluminum outlet with ferrule; 3/8" (9 mm) aluminum bolts welded to drain; cast aluminum stabilizer ring cast under-deck clamping ring; [T-5 aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-12 perforated 22 Ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

## RD-4A-RR Vandalproof Aluminum Roof Drain (All Purpose, Straight Outlet, Retrofit)

## Note: Edit specification clause to reflect choice of copper (RD-4C-RR) or stainless steel (RD-4SS-RR) roof drain in lieu of aluminum if desired.

C. Roof drains: Thaler RD-4A-RR drain for [1-3/4" (44 mm)] [2-3/4" (70 mm)] [3-3/4" (95 mm)] [5-3/4" (146 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate clamped directly to drain body; .090" (2.3 mm) pan-formed aluminum drain body, deck flange and straight aluminum outlet with aluminum ferrule; 3/8" (9 mm) aluminum bolts welded to drain; cast aluminum stabilizer ring; aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-9 Super-Seal EPDM sealing ring;] [T-12 perforated 22 Ga. (0.76 mm) s.s. ballast guard;][PVC coated deck flange] [bituminous painted deck flange].

## RD-4A-8 or 10 Vandalproof Big Aluminum Roof Drain (All Purpose, Straight Outlet, New Construction)

## Note: Edit specification clause to reflect choice of copper (RD-4C-8 or RD-4C-10) or stainless steel (RD-4SS-8 or RD-4SS-10) roof drain in lieu of aluminum if desired.

D. Roof drains: Thaler [RD-4A-8] [RD-4A-10] big, aluminum roof drain for [8" (203 mm)] [10" (254 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate clamped directly to drain body; .090" (2.3 mm) pan-formed aluminum drain body; deck flange and straight aluminum outlet with aluminum ferrule; 3/8" (9 mm) aluminum bolts welded to drain; cast aluminum stabilizer ring; cast aluminum under-deck clamping ring; [T-12 perforated 22 Ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RD-4A-8-RR or 10 Vandalproof Big Aluminum Roof Drain (All Purpose, Straight Outlet, Retrofit)

## Note: Edit specification clause to reflect choice of copper (RD-4C-RR-8 or RD-4C-RR-10) or Stainless steel (RD-4SS-8-RR or RD-4SS-10-RR) roof drain in lieu of aluminum if desired.

**E. Roof drains**: Thaler [RD-4A-8-RR] [RD-4A-10-RR] big aluminum retrofit roof drain for [8"(203 mm)] [10" (254 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate clamped directly to drain body; .090" (2.3 mm) pan-formed aluminum drain body, deck flange and straight aluminum outlet with EMSEAL tape; 3/8" (9 mm) aluminum bolts welded to drain; cast aluminum stabilizer ring; cast aluminum under-deck clamping ring; [T-12 perforated 22 Ga (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

RD-7A Vandalproof Aluminum Roof Drain (All Purpose, Straight Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-7C) or stainless steel (RD-7SS) roof drain in lieu of aluminum if desired.

F. Roof drains: Thaler RD-7A aluminum drain for [2" to 8" (51 mm to 203 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate clamped directly to drain body; .090" (2.3 mm) aluminum funnel drain body, four 3/8" (9 mm) aluminum mounting bolts welded to underbody reinforcement discs, deck flange and straight aluminum outlet with [T-5 aluminum sediment collar;] [T-6 aluminum ferrule;] [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

## RD-7A-RR Vandalproof Aluminum Roof Drain (All Purpose, Straight Outlet, Retrofit)

## Note: Edit specification clause to reflect choice of copper (RD-7C-RR) or stainless Steel (RD-7SS-RR) roof drain in lieu of aluminum if desired.

**G. Roof drains**: Thaler RD-7A-RR aluminum drain for [1-3/4" to 7-3/4"" (44 mm to 197 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate clamped directly to drain body; .090" (2.3 mm) aluminum round drain body, four 3/8" (3 mm) aluminum mounting bolts welded to underbody reinforcement discs, deck flange and straight aluminum outlet with [T-5 aluminum sediment collar;] [T-9 Super-Seal EPDM sealing ring;] [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RD-7A-8 Vandalproof Big Aluminum Roof Drain (All Purpose, Straight Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-7C-8) or stainless steel (RD-7SS-8) roof drain in lieu of aluminum if desired.

H. Roof drains: Thaler RD-7A-8 aluminum big roof drain for 8" (203 mm) leader size; with: vandalproof cast aluminum dome with hinged access gate welded to cast aluminum ring; .090" (2.3 mm) aluminum drain body, deck flange and straight aluminum outlet with aluminum ferrule; six 3/8" (9 mm) aluminum bolts welded to underbody reinforcement discs; [T-5 aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RD-7A-8-RR Vandalproof Big Aluminum Roof Drain (All Purpose, Straight Outlet, Retrofit)

## Note: Edit specification clause to reflect choice of copper (RD-7C-RR) or stainless steel (RD-7SS-RR) roof drain in lieu of aluminum if desired.

**I. Roof drains**: Thaler RD-7A-8-RR aluminum big re-roofing roof drain for 8" (203 mm) leader size; with: vandalproof cast aluminum dome with hinged access gate welded to cast aluminum ring; .090" (2.3 mm) aluminum drain body, deck flange and straight aluminum outlet with EMSEAL tape; six 3/8" (9 mm) aluminum bolts welded to underbody reinforcement discs; [T-5 aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

RD-14A Vandalproof Aluminum Roof Drain (All Purpose, Straight Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-14C) or stain (RD-14SS) roof drain in lieu of aluminum if desired.

**J. Roof drains:** Thaler RD-14A aluminum drain for [2" to 10" (51 mm to 254 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate welded to drain body; .090" (2.3 mm) spun aluminum flat drain body deck flange and straight seamless aluminum outlet with [T-5 aluminum sediment collar;] [T-6 aluminum ferrule;] [T-10 stainless steel under-deck clamp;] [T-7 aluminum flow control accessory;] [T-12 stainless steel ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RD-14A-RR Vandalproof Aluminum Roof Drain (All Purpose, Low Spot, Retrofit)

## Note: Edit specification clause to reflect choice of copper (RD-14C-RR) or stainless steel (RD-14SS-RR) roof drain in lieu of aluminum if desired.

K. Roof drains: Thaler RD-14A-RR aluminum drain for [1-3/4" to 5-3/4" (44 mm to 146 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate welded to drain body; .090" (2.3 mm) spun aluminum flat drain body, deck flange and straight seamless aluminum outlet with [T-5 aluminum sediment collar;] [T-9 Super-Seal EPDM sealing ring;] [T-10 stainless steel underdeck clamp;] [T-7 aluminum flow control accessory;] [T-12 stainless steel ballast guard;] [PVC coated deck flange][bituminous painted deck flange].

### RD-16A Vandalproof Aluminum Roof Drain (All Purpose, Straight, Offset Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-16C) or stainless steel (RD-16SS) roof drain in lieu of aluminum if desired.

L. Roof drains: Thaler RD-16A aluminum drain for [2" to 8" (51 mm to 204 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate welded to drain body; .090" (2.4 mm) aluminum drain body, deck flange and straight offset aluminum with [T-5 aluminum sediment collar;] [T-6 aluminum ferrule;] [T-10 stainless steel under-deckclamp;] [T-7 aluminum flow control accessory;] [T-12 s.s. ballast guard;] [PVC coat deck flange] [bituminous painted deck flange].

### RD-16A-RR Vandalproof Aluminum Roof Drain (All Purpose, Low Spot, Retrofit, Offset Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-16C-RR) or stainless steel (RD-16SS-RR) roof drain in lieu of aluminum if desired.

M. Roof drains: Thaler RD-16A-RR aluminum drain for [1-3/4" to 5-3/4" (44 mm to 146 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate welded to drain body; .090" (2.3 mm) aluminum flat drain body, deck flange and aluminum outlet with [T-5 copper sediment collar;] [T-9 Super-Seal EPDM sealing ring;] [T-10 stainless steel under-deck clamp;] [T-7 aluminum flow control accessory;] [T-12 s.s. ballast guard;] [PVC coated deck flange][bituminous painted deck flange].

### RD-160A Vandlproof Aluminum Roof Drain (All Purpose, Straight Offset Outlet)

Note: Edit specification clause to reflect choice of copper (RD-160C-RR) or stainless steel (RD-160SS-RR) roof drain in lieu of aluminum if desired.

**DD. Roof Drains:** Thaler RD-160A Aluminum drain for [2" to 5" (51 mm to 127 mm )] leader size with: vandalproof cast aluminum dome with hinged access gate; .090" (2.3 mm) aluminum drain body, deck flange and straight offset outlet with, cast aluminum stabilizer ring, 3/8" (9 mm) aluminum bolts welded to drain body and stabilizer ring, [T-5 aluminum sediment collar;] [T-6 aluminum ferrule;] [T-10 stainless steel under-deck clamp;] [T-7 aluminum flow control accessory;] [T-12

s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange];

### RD-19-SS Stainless Steel Roof Drain for Promenade Decks or Terraces

**N. Roof drains**: Thaler RD-19-SS drain for inverted roofs, for [2" (51 mm) to 6" (152 mm)] leader size; with: 7-3/4" (197 mm) removable, square, linear slotted [cast aluminum] [bronze] grate; 22 Ga. (0.8 mm) stainless steel drain body, 7-3/4" (197 mm) square x [specified height] with 1/4" (6 mm) or larger perforations throughout; deck flange; 0.12" (3 mm) stainless steel Type 304 straight outlet with [T-6 stainless steel ferrule]; [PVC coated deck flange] [bituminous painted deck flange].

### RD-19-SS-RR Stainless Steel Retrofit Roof Drain for Promenade Decks or Terraces

**O. Roof drains**: Thaler RD-19-SS-RR retrofit drain for inverted roofs, for [1-3/4" (44 mm) to 5-3/4" (146 mm)] leader size; with: 7-3/4" (197 mm) removable, square, linear slotted [cast aluminum][bronze] grate; 22 Ga. (0.8 mm) stainless steel drain body, 7-3/4" (197 mm) square x [specified height] with 1/4" (6 mm) or larger perforations throughout; deck flange; stainless steel straight outlet with [Super-Seal EPDM sealing ring]; [PVC coated deck flange][bituminous painted deck flange].

#### *RD-24A Vandalproof Aluminum Roof Drain (All Purpose, Straight Outlet)*

## Note: Edit specification clause to reflect choice of copper (RD-24C) or stainless steel (RD-24SS) roof drain in lieu of aluminum if desired.

P. Roof drains: Thaler RD-24A drain for conventional roofs, for [2" (51 mm)] [3" (76 mm)] [4" (102 mm) [5" (127 mm) [6" (152 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate and clamping ring; 0.09" (2.3 mm) aluminum drain body, deck flange and straight aluminum outlet with aluminum ferrule; 3/8" (9 mm) aluminum bolts welded to underbody reinforcement discs; [T-5 aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 stainless steel ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

#### *RD-24A-RR* Vandalproof Aluminum Roof Drain (All Purpose, Retrofit, Straight Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-24C-RR) or stainless steel (RD-24SS-RR) roof drain in lieu of aluminum if desired.

**Q. Roof drains**: Thaler RD-24A-RR drain for [1-3/4" to 7-3/4" (44 mm to 197 mm)] leader size with: vandalproof cast aluminum dome with hinged access gate and clamping ring, four 3/8" (9 mm) mounting bolts welded to underbody reinforcement discs, 0.09" (2.3 mm) aluminum drain body, deck flange and straight aluminum outlet with EPDM Super-Seal; [T-5 aluminum sediment collar;] [T-6 aluminum ferrule;] [T-7 aluminum flow control accessory;] [T-10 stainless steel underdeck clamp;] [T-12 stainless steel ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

RD-24A-8 or 10 Vandalproof Big Aluminum Roof Drain (All Purpose, Straight Outlet)

Note: Edit specification clause to reflect choice of copper (RD-24C-8 or RD-24C-10) or Stainless steel (RD-24SS-8 or RD-24SS-10) roof drain in lieu of aluminum if desired.

**R. Roof drains**: Thaler [RD-24A-8] [RD-24A-10] drain for [8" (203 mm)] [10" (254 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate welded to cast aluminum ring; .090" (2.3 mm) flat aluminum drain body; deck flange and straight aluminum outlet with aluminum ferrule; six 3/8" (9 mm) mounting bolts welded to underbody reinforcement discs; [T-10 stainless steel underdeck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange][bituminoue painted deck flange]

### RD-24A-RR-8 or10 Vandalproof Big Aluminum Roof Drain (All Purpose, Straight Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-24C-RR-8 or RD-24C-RR-10) or stainless steel (RD-24SS-RR-8 or RD-24SS-RR-10) roof drain lieu of aluminum if desired.

**S. Roof drains**: Thaler [RD-24A-RR-8] [RD-24A-RR-10] drain for [8" (203 mm)] [10" (254 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate welded to cast aluminum ring; .090" (2.3 mm) flat aluminum drain body, deck flange and straight aluminum outlet with EMSEAL tape; six 3/8" (9 mm) mounting bolts welded to underbody reinforcement discs; [T-10 stainless steel underdeck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### *RD-240A Vandlproof Aluminum Roof Drain (All Purpose, Straight Outlet)*

## Note: Edit specification clause to reflect choice of copper (RD-240C) or stainless steel (RD-2SS) roof drain lieu of aluminum if desired.

EE. Roof Drains: Thaler RD-240A drain for conventional roofs, for [2" (51 mm)] [3" (76 mm)] [4" (102 mm)] [5" (127 mm)] [6" (152 mm)] leader size; with: vandalproof cast aluminum dome with hinged access gate and clamping ring; .09" (2.3 mm) aluminum drain body, deck flange and straight aluminum outlet [with] [without] T-6 aluminum ferrule; 3/8" (9 mm) aluminum bolts welded to reinforcement discs; [T-5 aluminum sediment collar]; [T-6 aluminum ferrule]; [T-7 flow control accessory]; [T-10 stainless stel underdeck clamp]; [T-12 stainless steel ballast guard]; [PVC coated deck flange] [bituminous painted deck flange];

#### RD-28A- Economy Aluminum Roof Drain (All Purpose, Funnel Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-28C) or stainless steel (RD-28SS) roof drain in lieu of aluminum if desired.

**T. Roof drains**: Thaler RD-28A drain for [2" to 6" (51 mm to 152 mm)] leader size; with: removable [PVC] [cast aluminum] strainer; perforated .064" (1.6 mm) aluminum gravel stop; .064" (1.6 mm) deck flange and funnel outlet fitted with aluminum ferrule; [T-5 aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-10 stainless steel

under-deck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RD-28A-RR Economy Retrofit Aluminum Roof Drain (All Purpose, Funnel Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-28C-RR or stainless steel (RD-28SS-RR) roof drain in lieu of aluminum if desired.

U. Roof drains: Thaler RD-28A-RR drain for [1-3/4" (44 mm)] [2-3/4" (70 mm)] [3-3/4" (95 mm)] [4-3/4" (121 mm)] [5-3/4" (146 mm)] leader size, with: removable [PVC][cast aluminum] strainer; perforated .064" (1.6 mm) aluminum gravel stop; .064" (1.6 mm) deck flange and funnel outlet fitted with Super-Seal EPDM sealing ring; [T-5 aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 Ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

#### RD-29A Economy Aluminum Roof Drain (All Purpose, Straight Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-29C) or stainless steel (RD-29SS) roof drain in lieu of aluminum if desired.

V. Roof drains: Thaler RD-29A drain for [2" to 6" (51 mm to 152 mm)] leader size; with: removable [PVC] [cast aluminum] strainer; perforated .064" (1.6 mm) seamless aluminum gravel stop; .064" (1.6 mm) deck flange and straight outlet fitted with aluminum ferrule; [T-5 aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 Ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

# *RD-29A-RR Economy Retrofit Aluminum Roof Drain (All Purpose, Straight Outlet)*

## Note: Edit specification clause to reflect choice of copper (RD-29C-RR) or stainless steel (RD-29SS-RR) roof drain in lieu of aluminum if desired.

W. Roof drains: Thaler RD-29A-RR drain for [1-3/4" to 5-3/4" (44 mm to 146 mm)] leader size; with: removable[PVC] [cast aluminum] strainer; perforated .064" (1.6 mm) seamless aluminum gravel stop; .064" (1.6 mm) deck flange and straight outlet fitted with a Super-Seal EPDM sealing ring; [T-5 aluminum sediment collar;] [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 Ga. (0.76 mm) s.s. ballast guard;] [PVC

coated deck flange][bituminous painted deck flange].

#### RDX30-A Economy Retrofit Aluminum Roof Drain (All Purpose, Funnel Outlet)

## Note: Edit specification clause to reflect choice of copper (RDX30-C) or stainless steel (RDX30-SS) roof drain in lieu of aluminum if desired.

X. Roof drains: Thaler RDX30-A drain for [2" to 6" (51 mm to 152 mm)] leader size with: vandalproof cast aluminum strainer with integral gravel guard fins and 3/8" (9 mm) s.s. 0.064 " (1.6 mm) spun aluminum compression unit; deck flange with funnel type straight outlet fitted with aluminum ferrule; [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 Ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RDX30-A-RR Economy Retrofit Aluminum Super-Seal Retrofit Roof Drain (All Purpose, Funnel Outlet)

## Note: Edit specification clause to reflect choice of copper (RDX30-C-RR) or stainless steel (RDX30-SS-RR) roof drain in lieu of aluminum if desired.

Y. Roof drains: Thaler RDX30-A-RR drain for [1-3/4" to 5-3/4" (44 mm to 146 mm)] leader size; with: vandalproof cast aluminum strainer with integral gravel guard fins and 3/8" (9 mm) s.s. retaining bolt; strainer retainer/membrane compression unit; .064" (1.6 mm) spun aluminum compression unit; deck flange with funnel type straight outlet fitted with Super-Seal EPDM sealing ring; [T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;]

[T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RD-300A Economy Aluminum Roof Drain (Recessed Body, Funnel Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-300C) or stainless steel (RD-300SS) roof drain in lieu of aluminum if desired.

**FF. Roof drains:** Thaler RDX300-A drain for [2" (51 mm)] to [6" (152 mm)] leader size, with: vandalproof cast aluminum strainer with integral gravel guard fins and 3/8" (10 mm) s.s. retaining bolt; strainer retainer/membrane compression unit; .064" (1.6 mm) spun aluminum compression unit; deck flange with funnel type straight outlet fitted with aluminum ferrule; [T-7 aluminum flow control accessory;] [T-10 stainless steel underdeck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange];

### RD-38A Economy Aluminum Roof Drain (All Purpose, Funnel Out

## Note: Edit specification clause to reflect choice of copper (RD-38C) or stainless steel (RD-38SS) roof drain in lieu of aluminum if desired.

Z. Roof drains: Thaler RD-38A drain for [2" to 6" (51 mm to 152 mm)] leader size; with: removable cast aluminum strainer welded to clamping ring; .064" (1.6 mm) deck flange with funnel type straight outlet fitted with aluminum ferrule; [T-5 aluminum sediment collar][T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 ga. (0.76mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RD-38A-RR Economy Retrofit Aluminum Retrofit Roof Drain (All Purpose, Funnel Outlet)

Note: Edit specification clause to reflect choice of copper (RD-38C-RR) or stainless steel (RD-38SS-RR) roof drain in lieu of aluminum if desired.

**AA. Roof drains:** Thaler RD-38A-RR drain for [1-3/4" to 5-3/4" (44 mm to 146 mm)] leader size; with: removable cast aluminum strainer welded to claming ring; .064"

(1.6 mm) deck flange with funnel type straight outlet fitted with Super-Seal EPDM sealing ring; [T-5 aluminum sediment collar][T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

#### RD-39A Economy Aluminum Roof Drain (All Purpose, Funnel Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-39C) or stainless steel (RD-39SS) roof drain in lieu of aluminum if desired.

**BB.** Roof drains: Thaler RD-39A drain for [2" to 6" (51 mm to 152 mm)] leader size; with: removable cast aluminum strainer welded to claming ring; .064" (1.6 mm) deck flange with straight outlet fitted with aluminum ferrule; [T-5 aluminum sediment collar][T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

### RD-39A-RR Economy Aluminum Retrofit Roof Drain (All Purpose, Straight Outlet)

## Note: Edit specification clause to reflect choice of copper (RD-39C-RR) or stainless steel (RD-39SS-RR) roof drain in lieu of aluminum if desired.

**CC. Roof drains:** Thaler RD-39A-RR drain for [1-3/4" to 5-3/4" (44 mm to 146 mm)] leader size; with: removable cast aluminum strainer welded to clamping ring; .064" (1.6 mm) deck flange with straight outlet fitted with Super-Seal EPDM sealing ring; [T-5 aluminum sediment collar][T-7 aluminum flow control accessory;] [T-10 stainless steel under-deck clamp;] [T-12 perforated 22 ga. (0.76 mm) s.s. ballast guard;] [PVC coated deck flange] [bituminous painted deck flange].

#### DD-1A Aluminum Terrace Deck (or Floor) Drain

## Note: Edit specification clause to reflect choice of copper (RD-40C) roof drain in lieu of aluminum if desired.

**Thaler DD-1A** drain for [3" (76 mm)] leader size, with: cast aluminum cover and stainless steel countersunk flat head screws; .064" (1.6 mm) aluminum deck flange with funnel type straight outlet; 1/4" (6 mm) lower aluminum ring to receive four screws.

#### **PART 3 EXECUTION**

- 3.01 EXAMINATION
  - A. Report to the Contractor in writing, defects of work prepared by other trades and other unsatisfactory site conditions. Verify site dimensions. Commencement of work will imply acceptance of prepared work.
  - B. Co-ordinate with Sections [07500] and [15000] prior to installation of drains.
- 3.02 INSTALLATION

A. Install roof drains in accordance with manufacturer's printed instructions.

#### BUR

B. Set deck flange in layer of plastic cement and flash in with 3 overlapping layers of felt flashing.

#### Modified Bitumen

C. Torch membrane until bitumen is fluid and set flange into fluid. Flash in flange with two overlapping layers of ModBit and seal with asphalt sealer. Do not overheat (melt) EPDM Base Seal.

#### Single Ply

D. Set deck flange in layer of membrane adhesive and extend single ply over flange and seal in accordance with membrane manufacturer's recommendations.

## Note: For PVC membrane, specify PVC coated deck flange by adding suffix P to end of Thaler model number, e.g. RD-1-P; weld roofing to deck flange using PVC torch.

#### **PVC Single Ply**

E. Set deck flange in layer of membrane adhesive and extend single ply over flange. Weld roofing to deck flange using PVC torch.

### 3.03 FIELD QUALITY CONTROL

A. Comply with the requirements of section [01400 – Quality Control].

#### 3.04 ADJUSTINING

A. Verify that all manufactured units have been installed in accordance with specifications and details, and will function as intended. Adjust any items where necessary to ensure proper operation.

#### 3.05 CLEANING

A. Clean manufactured units using materials and methods approved by manufacturer. Do not use cleaners or techniques which could impair performance of the roofing system.

#### **End of Section**