ROOF DRAINS

1. GENERAL

1.1 Work Included

- .1 Supply and installation of roof accessories, including:
 - .1 Roof drains

1.2 System Description

- .1 Section 07210 Building Insulations
- .2 Section 07515 SBS Modified Bituminous Roofing

1.3 References

- .1 ANSI A112.21.2 Roof Drains
- .2 Canadian Roofing Contractor's Association(CRCA)
- .3 National Roofing Contractor's Association (NRCA)
- .4 Canadian Urethane Foam Contractor's Association (CUFCA) 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"

1.4 Submittals

- .1 Manufacturer's descriptive literature for each product, including section or other type details.
- .2 Manufacturer's written installation instructions.
- .3 Shop Drawings and samples, when required, in accordance with Sections 01300 Submittals. Indicate drain size, type and location of tapered insulation sumps as applicable.

1.5 Quality Assurance

.1 Roof accessories Manufacturer to have minimum of five (5) years documented experience in the design and fabrication of roofing specialties and accessories.

1.6 Special Warranty

.1 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.

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2. PRODUCTS

2.1 Manufacturer

- .1 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 Contract Administrator, 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.
 - .5 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.

2.2 General

.1 This Section to be read in conjunction with Sections 07515 – SBS Modified Bituminous Roofing and Section 15200-00 – Process Piping.

2.3 Manufactured Units

.1 RD-7A-RR Vandalproof Aluminum Roof Drain (Straight Outlet)

Roof drains: Thaler RD-7A-RR aluminum drain for $(1^{-3}/_4"$ to $7^{-3}/_4"$ (44 mm to 197 mm)) leader size; with: vandal proof 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-10 stainless steel under-deck clamp; bituminous painted deck flange.

ROOF DRAINS

3. EXECUTION

3.1 Examination

- .1 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.
- .2 Co-ordinate with Sections 07515 SBS Modified Bituminous Roofing and 15200-00 Process Piping prior to installation of drains.

3.2 Installation

.1 Install roof drains in accordance with Manufacturer's printed instructions.

3.3 Modified Bitumen

.1 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.

3.4 Field Quality Control

.1 Comply with the requirements of Section 01400 – Quality Control.

3.5 Adjusting

1 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.

3.6 Cleaning

1 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