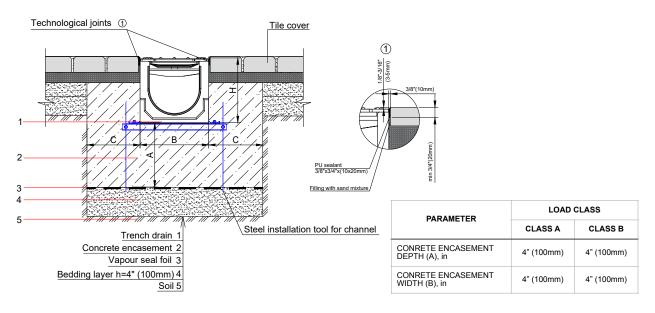


ENCLOSED PAVER PAVEMENT INSTALLATION

### 4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN



#### NOTES:

- SPECIFIER IS RESPONSIBLE FOR CONCRETE ENCASEMENT AND REINFORCING BASED UPON APPLICATION AND LOCAL CODES.
- 2. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
- 3. THIS INSTALLATION SCHEME IS A RECOMMENDATION. CONSULT WITH THE MANUFACTURER FOR INSTALLATION INSTRUCTIONS
- 4. IF TRENCH DRAIN SYSTEM HAS A VERTICAL OUTLET AT THE END OF THE RUN, IT IS NECESSARY TO ADD AN ADDITIONAL 4" (100mm) OF CONCRETE ENCASEMENT AFTER THE END CAP.
- 5. THE FINISHED LEVEL OF CONCRETE SURROUND SHOULD BE 1/8" 3/16" (3-5mm) ABOVE THE TOP OF THE CHANNEL EDGE.

**GENERAL:** THE TRENCH DRAIN SHALL BE VODALAND CANADA BASE 100PC AS MANUFACTURED BY VODALAND OR APPROVED EQUAL.

SPECIFICATION: CHANNELS SHALL BE 39.4" (1000mm) LONG AND THE NOMINAL CLEAR OPENING SHALL BE 4" (100mm) WITH 5.4" (138mm) OVERALL WIDTH AND BUILT IN SLOPE OF 0.5% OR NEUTRAL 0% AS PER SPECIFIER'S REQUIREMENTS. CHANNELS SHALL HAVE MALE-TO-FEMALE INTERLOCKING JOINTS. CHANNELS CAN BE EQUIPPED WITH STEEL EDGE RAILS IF REQUIRED. GRATINGS SHALL MEET THE SYSTEM LOAD CLASS SPECIFIED. CHANNELS AND GRATE SHALL WITHSTAND A REQUIRED EN1433 LOAD CLASS.

**MATERIALS:** BASE 100PC TRENCH DRAIN SHALL BE MANUFACTURED FROM POLYMER CONCRETE WITH THE FOLLOWING APPROXIMATE PROPERTIES:

| COMPRESSIVE STRENGTH              | 14,000 PSI |
|-----------------------------------|------------|
| FLEXURAL STRENGTH                 | 4,000 PSI  |
| TENSILE STRENGTH                  | 1,500 PSI  |
| WATER ABSORPTION:                 | 0.05%      |
| FROST PROOF:                      | YES        |
| DILUTE ACID AND ALKALI RESISTANT: | YES        |
| SALT PROOF:                       | YES        |

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY VODALAND CANADA INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY VODALAND CANADA INC.



ENCLOSED PAVER PAVEMENT INSTALLATION

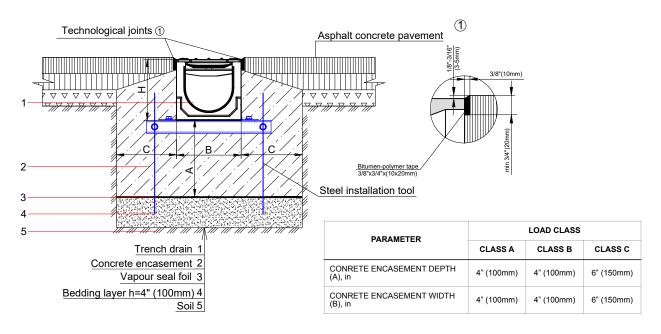
4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN

| GRATE OPTIONS:20101206012090120801920201820501820202090220303 | GALVANIZED STEEL GRATE SLOTTED COPPER GRATE SLOTTED STAINLESS STEEL GRATE SLOTTED PLASTIC GRATE SLOTTED GALVANIZED STEEL GRATE ADA STAINLESS STEEL GRATE ADA GALVANIZED STEEL GRATE MESH ADA STAINLESS STEEL GRATE MESH ADA DUCTILE CAST IRON GRATE SLOTTED | A15<br>A15<br>A15<br>A15<br>A15<br>B125<br>B125<br>C250 | ADDITIONAL OPTIONS: 4" INLINE CATCH BASIN4" END CAP W/ OUTLET4" END CAP4" MOUNTING BRACKET4" STEEL EDGE RAILS |
|---|---|---|---|
|   |   |   |   |



**ENCLOSED ASPHALT PAVEMENT INSTALLATION** 

### 4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN



### NOTES:

- SPECIFIER IS RESPONSIBLE FOR CONCRETE ENCASEMENT AND REINFORCING BASED UPON APPLICATION AND LOCAL CODES.
- 2. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
- 3. THIS INSTALLATION SCHEME IS A RECOMMENDATION. CONSULT WITH THE MANUFACTURER FOR INSTALLATION INSTRUCTIONS.
- 4. IF TRENCH DRAIN SYSTEM HAS A VERTICAL OUTLET AT THE END OF THE RUN, IT IS NECESSARY TO ADD AN ADDITIONAL 4" (100mm) OF CONCRETE ENCASEMENT AFTER THE END CAP.
- 5. THE FINISHED LEVEL OF CONCRETE SURROUND SHOULD BE 1/8" 3/16" (3-5mm) ABOVE THE TOP OF THE CHANNEL EDGE.

**GENERAL:** THE TRENCH DRAIN SHALL BE VODALAND CANADA BASE 100PC AS MANUFACTURED BY VODALAND OR APPROVED EQUAL.

SPECIFICATION: CHANNELS SHALL BE 39.4" (1000mm) LONG AND THE NOMINAL CLEAR OPENING SHALL BE 4" (100mm) WITH 5.4" (138mm) OVERALL WIDTH AND BUILT IN SLOPE OF 0.5% OR NEUTRAL 0% AS PER SPECIFIER'S REQUIREMENTS. CHANNELS SHALL HAVE MALE-TO-FEMALE INTERLOCKING JOINTS. CHANNELS CAN BE EQUIPPED WITH STEEL EDGE RAILS IF REQUIRED. GRATINGS SHALL MEET THE SYSTEM LOAD CLASS SPECIFIED. CHANNELS AND GRATE SHALL WITHSTAND A REQUIRED EN1433 LOAD CLASS.

**MATERIALS:** BASE 100PC TRENCH DRAIN SHALL BE MANUFACTURED FROM POLYMER CONCRETE WITH THE FOLLOWING APPROXIMATE PROPERTIES:

| COMPRESSIVE STRENGTH              | 14,000 PSI |
|-----------------------------------|------------|
| FLEXURAL STRENGTH                 | 4,000 PSI  |
| TENSILE STRENGTH                  | 1,500 PSI  |
| WATER ABSORPTION:                 | 0.05%      |
| FROST PROOF:                      | YES        |
| DILUTE ACID AND ALKALI RESISTANT: | YES        |
| SALT PROOF:                       | YES        |

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY VODALAND CANADA INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY VODALAND CANADA INC.



**ENCLOSED ASPHALT PAVEMENT INSTALLATION** 

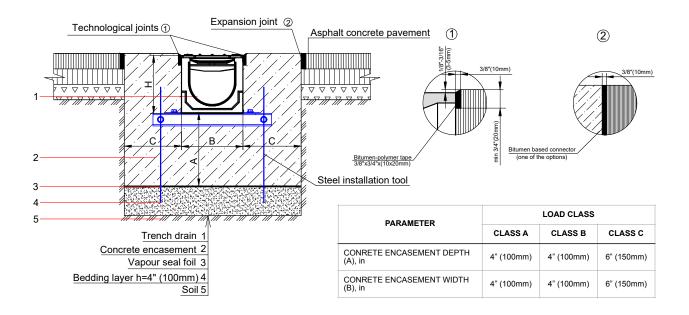
4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN

| <b>GRATE OPTIONS</b> | :                                 |      | ADDITIONAL OPTIONS:   |
|----------------------|-----------------------------------|------|-----------------------|
| 20101                | GALVANIZED STEEL GRATE SLOTTED    | A15  | 4" INLINE CATCH BASIN |
| 20601                | COPPER GRATE SLOTTED              | A15  | 4" END CAP W/ OUTLET  |
| 20901                | STAINLESS STEEL GRATE SLOTTED     | A15  | 4" END CAP            |
| 208019               | PLASTIC GRATE SLOTTED             | A15  | 4" MOUNTING BRACKET   |
| 202018               | GALVANIZED STEEL GRATE ADA        | A15  | 4" STEEL EDGE RAILS   |
| 205018               | STAINLESS STEEL GRATE ADA         | A15  |                       |
| 2020                 | GALVANIZED STEEL GRATE MESH ADA   | B125 |                       |
| 20902                | STAINLESS STEEL GRATE MESH ADA    | B125 |                       |
| 20303                | DUCTILE CAST IRON GRATE SLOTTED   | C250 |                       |
| 20403                | DUCTILE CAST IRON GRATE MESH      | C250 |                       |
| 20403-ADA            | DUCTILE CAST IRON GRATE ADA       | C250 |                       |
| 283031               | DUCTILE CAST IRON GRATE SLOTTED   | C250 |                       |
| 203032               | DUCTILE CAST IRON GRATE PROTECTOR | C250 |                       |



EXPOSED ASPHALT PAVEMENT INSTALLATION

### 4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN



### NOTES:

- SPECIFIER IS RESPONSIBLE FOR CONCRETE ENCASEMENT AND REINFORCING BASED UPON APPLICATION AND LOCAL CODES.
- 2. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
- 3. THIS INSTALLATION SCHEME IS A RECOMMENDATION. CONSULT WITH THE MANUFACTURER FOR INSTALLATION INSTRUCTIONS.
- 4. IF TRENCH DRAIN SYSTEM HAS A VERTICAL OUTLET AT THE END OF THE RUN, IT IS NECESSARY TO ADD AN ADDITIONAL 4" (100mm) OF CONCRETE ENCASEMENT AFTER THE END CAP.
- 5. THE FINISHED LEVEL OF CONCRETE SURROUND SHOULD BE 1/8" 3/16" (3-5mm) ABOVE THE TOP OF THE CHANNEL EDGE.

**GENERAL:** THE TRENCH DRAIN SHALL BE VODALAND CANADA BASE 100PC AS MANUFACTURED BY VODALAND OR APPROVED EQUAL.

SPECIFICATION: CHANNELS SHALL BE 39.4" (1000mm) LONG AND THE NOMINAL CLEAR OPENING SHALL BE 4" (100mm) WITH 5.4" (138mm) OVERALL WIDTH AND BUILT IN SLOPE OF 0.5% OR NEUTRAL 0% AS PER SPECIFIER'S REQUIREMENTS. CHANNELS SHALL HAVE MALE-TO-FEMALE INTERLOCKING JOINTS. CHANNELS CAN BE EQUIPPED WITH STEEL EDGE RAILS IF REQUIRED. GRATINGS SHALL MEET THE SYSTEM LOAD CLASS SPECIFIED. CHANNELS AND GRATE SHALL WITHSTAND A REQUIRED EN1433 LOAD CLASS.

**MATERIALS:** BASE 100PC TRENCH DRAIN SHALL BE MANUFACTURED FROM POLYMER CONCRETE WITH THE FOLLOWING APPROXIMATE PROPERTIES:

| COMPRESSIVE STRENGTH              | 14,000 PSI |
|-----------------------------------|------------|
| FLEXURAL STRENGTH                 | 4,000 PSI  |
| TENSILE STRENGTH                  | 1,500 PSI  |
| WATER ABSORPTION:                 | 0.05%      |
| FROST PROOF:                      | YES        |
| DILUTE ACID AND ALKALI RESISTANT: | YES        |
| SALT PROOF:                       | YES        |

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY VODALAND CANADA INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY VODALAND CANADA INC.



**EXPOSED ASPHALT PAVEMENT INSTALLATION** 

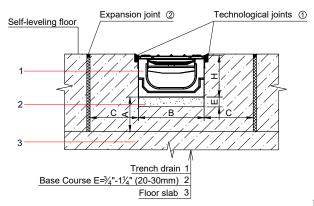
4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN

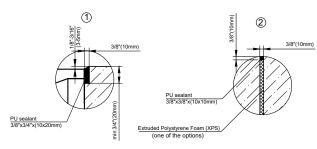
| <b>GRATE OPTIONS</b> | <b>:</b>                          |      | ADDITIONAL OPTIONS:   |
|----------------------|-----------------------------------|------|-----------------------|
| 20101                | GALVANIZED STEEL GRATE SLOTTED    | A15  | 4" INLINE CATCH BASIN |
| 20601                | COPPER GRATE SLOTTED              | A15  | 4" END CAP W/ OUTLET  |
| 20901                | STAINLESS STEEL GRATE SLOTTED     | A15  | 4" END CAP            |
| 208019               | PLASTIC GRATE SLOTTED             | A15  | 4" MOUNTING BRACKET   |
| 202018               | GALVANIZED STEEL GRATE ADA        | A15  | 4" STEEL EDGE RAILS   |
| 205018               | STAINLESS STEEL GRATE ADA         | A15  |                       |
| 2020                 | GALVANIZED STEEL GRATE MESH ADA   | B125 |                       |
| 20902                | STAINLESS STEEL GRATE MESH ADA    | B125 |                       |
| 20303                | DUCTILE CAST IRON GRATE SLOTTED   | C250 |                       |
| 20403                | DUCTILE CAST IRON GRATE MESH      | C250 |                       |
| 20403-ADA            | DUCTILE CAST IRON GRATE ADA       | C250 |                       |
| 283031               | DUCTILE CAST IRON GRATE SLOTTED   | C250 |                       |
| 203032               | DUCTILE CAST IRON GRATE PROTECTOR | C250 |                       |
|                      |                                   |      |                       |



EXPOSED CONCRETE PAVEMENT SHALLOW INSTALLATION

### 4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN





| PARAMETER                        | LOAD CLASS |            |            |  |
|----------------------------------|------------|------------|------------|--|
|                                  | CLASS A    | CLASS B    | CLASS C    |  |
| CONRETE ENCASEMENT DEPTH (A), in | 4" (100mm) | 4" (100mm) | 6" (150mm) |  |
| CONRETE ENCASEMENT WIDTH (B), in | 4" (100mm) | 4" (100mm) | 6" (150mm) |  |

### NOTES:

- SPECIFIER IS RESPONSIBLE FOR CONCRETE ENCASEMENT AND REINFORCING BASED UPON APPLICATION AND LOCAL CODES.
- EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
- THIS INSTALLATION SCHEME IS A RECOMMENDATION. CONSULT WITH THE MANUFACTURER FOR INSTALLATION INSTRUCTIONS.
- 4. IF TRENCH DRAIN SYSTEM HAS A VERTICAL OUTLET AT THE END OF THE RUN, IT IS NECESSARY TO ADD AN ADDITIONAL 4" (100mm) OF CONCRETE ENCASEMENT AFTER THE END CAP.
- 5. THE FINISHED LEVEL OF CONCRETE SURROUND SHOULD BE 1/8" 3/16" (3-5mm) ABOVE THE TOP OF THE CHANNEL EDGE.

**GENERAL:** THE TRENCH DRAIN SHALL BE VODALAND CANADA BASE 100PC AS MANUFACTURED BY VODALAND OR APPROVED EQUAL.

SPECIFICATION: CHANNELS SHALL BE 39.4" (1000mm) LONG AND THE NOMINAL CLEAR OPENING SHALL BE 4" (100mm) WITH 5.4" (138mm) OVERALL WIDTH AND BUILT IN SLOPE OF 0.5% OR NEUTRAL 0% AS PER SPECIFIER'S REQUIREMENTS. CHANNELS SHALL HAVE MALE-TO-FEMALE INTERLOCKING JOINTS. CHANNELS CAN BE EQUIPPED WITH STEEL EDGE RAILS IF REQUIRED. GRATINGS SHALL MEET THE SYSTEM LOAD CLASS SPECIFIED. CHANNELS AND GRATE SHALL WITHSTAND A REQUIRED EN1433 LOAD CLASS.

**MATERIALS:** BASE 100PC TRENCH DRAIN SHALL BE MANUFACTURED FROM POLYMER CONCRETE WITH THE FOLLOWING APPROXIMATE PROPERTIES:

COMPRESSIVE STRENGTH 14,000 PSI
FLEXURAL STRENGTH 4,000 PSI
TENSILE STRENGTH 1,500 PSI
WATER ABSORPTION: 0.05%
FROST PROOF: YES
DILUTE ACID AND ALKALI RESISTANT: YES
SALT PROOF: YES

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY VODALAND CANADA INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY VODALAND CANADA INC.





EXPOSED CONCRETE PAVEMENT SHALLOW INSTALLATION

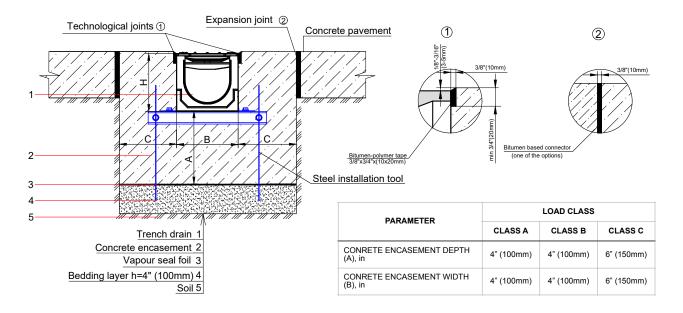
4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN

| GRATE OPTIONS: |                                   |      | ADDITIONAL OPTIONS:   |
|----------------|-----------------------------------|------|-----------------------|
| 20101          | GALVANIZED STEEL GRATE SLOTTED    | A15  | 4" INLINE CATCH BASIN |
| 20601          | COPPER GRATE SLOTTED              | A15  | 4" END CAP W/ OUTLET  |
| 20901          | STAINLESS STEEL GRATE SLOTTED     | A15  | 4" END CAP            |
| 208019         | PLASTIC GRATE SLOTTED             | A15  | 4" MOUNTING BRACKET   |
| 202018         | GALVANIZED STEEL GRATE ADA        | A15  | 4" STEEL EDGE RAILS   |
| 205018         | STAINLESS STEEL GRATE ADA         | A15  |                       |
| 2020           | GALVANIZED STEEL GRATE MESH ADA   | B125 |                       |
| 20902          | STAINLESS STEEL GRATE MESH ADA    | B125 |                       |
| 20303          | DUCTILE CAST IRON GRATE SLOTTED   | C250 |                       |
| 20403          | DUCTILE CAST IRON GRATE MESH      | C250 |                       |
| 20403-ADA      | DUCTILE CAST IRON GRATE ADA       | C250 |                       |
| 283031         | DUCTILE CAST IRON GRATE SLOTTED   | C250 |                       |
| 203032         | DUCTILE CAST IRON GRATE PROTECTOR | C250 |                       |



EXPOSED CONCRETE PAVEMENT INSTALLATION

### 4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN



### NOTES:

- SPECIFIER IS RESPONSIBLE FOR CONCRETE ENCASEMENT AND REINFORCING BASED UPON APPLICATION AND LOCAL CODES.
- EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
- 3. THIS INSTALLATION SCHEME IS A RECOMMENDATION. CONSULT WITH THE MANUFACTURER FOR INSTALLATION INSTRUCTIONS.
- 4. IF TRENCH DRAIN SYSTEM HAS A VERTICAL OUTLET AT THE END OF THE RUN, IT IS NECESSARY TO ADD AN ADDITIONAL 4" (100mm) OF CONCRETE ENCASEMENT AFTER THE END CAP.
- 5. THE FINISHED LEVEL OF CONCRETE SURROUND SHOULD BE 1/8" 3/16" (3-5mm) ABOVE THE TOP OF THE CHANNEL EDGE.

**GENERAL:** THE TRENCH DRAIN SHALL BE VODALAND CANADA BASE 100PC AS MANUFACTURED BY VODALAND OR APPROVED EQUAL.

SPECIFICATION: CHANNELS SHALL BE 39.4" (1000mm) LONG AND THE NOMINAL CLEAR OPENING SHALL BE 4" (100mm) WITH 5.4" (138mm) OVERALL WIDTH AND BUILT IN SLOPE OF 0.5% OR NEUTRAL 0% AS PER SPECIFIER'S REQUIREMENTS. CHANNELS SHALL HAVE MALE-TO-FEMALE INTERLOCKING JOINTS. CHANNELS CAN BE EQUIPPED WITH STEEL EDGE RAILS IF REQUIRED. GRATINGS SHALL MEET THE SYSTEM LOAD CLASS SPECIFIED. CHANNELS AND GRATE SHALL WITHSTAND A REQUIRED EN1433 LOAD CLASS.

**MATERIALS:** BASE 100PC TRENCH DRAIN SHALL BE MANUFACTURED FROM POLYMER CONCRETE WITH THE FOLLOWING APPROXIMATE PROPERTIES:

| COMPRESSIVE STRENGTH              | 14,000 PSI |
|-----------------------------------|------------|
| FLEXURAL STRENGTH                 | 4,000 PSI  |
| TENSILE STRENGTH                  | 1,500 PSI  |
| WATER ABSORPTION:                 | 0.05%      |
| FROST PROOF:                      | YES        |
| DILUTE ACID AND ALKALI RESISTANT: | YES        |
| SALT PROOF:                       | YES        |

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY VODALAND CANADA INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY VODALAND CANADA INC.



EXPOSED CONCRETE PAVEMENT INSTALLATION

4" (100mm) BASE POLYMER CONCRETE TRENCH DRAIN

| <b>GRATE OPTIONS:</b> | :                                 |      | ADDITIONAL OPTIONS:   |
|-----------------------|-----------------------------------|------|-----------------------|
| 20101                 | GALVANIZED STEEL GRATE SLOTTED    | A15  | 4" INLINE CATCH BASIN |
| 20601                 | COPPER GRATE SLOTTED              | A15  | 4" END CAP W/ OUTLET  |
| 20901                 | STAINLESS STEEL GRATE SLOTTED     | A15  | 4" END CAP            |
| 208019                | PLASTIC GRATE SLOTTED             | A15  | 4" MOUNTING BRACKET   |
| 202018                | GALVANIZED STEEL GRATE ADA        | A15  | 4" STEEL EDGE RAILS   |
| 205018                | STAINLESS STEEL GRATE ADA         | A15  |                       |
| 2020                  | GALVANIZED STEEL GRATE MESH ADA   | B125 |                       |
| 20902                 | STAINLESS STEEL GRATE MESH ADA    | B125 |                       |
| 20303                 | DUCTILE CAST IRON GRATE SLOTTED   | C250 |                       |
| 20403                 | DUCTILE CAST IRON GRATE MESH      | C250 |                       |
| 20403-ADA             | DUCTILE CAST IRON GRATE ADA       | C250 |                       |
| 283031                | DUCTILE CAST IRON GRATE SLOTTED   | C250 |                       |
| 203032                | DUCTILE CAST IRON GRATE PROTECTOR | C250 |                       |