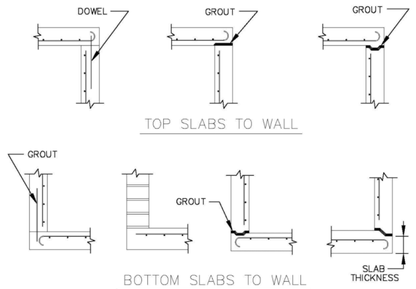

REBAR STRAIGHT END EMBEDMENT IN LIEU OF ACI STANDARD HOOKS FOR TOP AND BOTTOM SLABS

OPTIONAL CONSTRUCTION JOINTS

ENGINEERING STANDARDS 2019			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	OPTIONAL CONSTRUCTIONAL JOINTS	DATE: JUNE 1996 DWG. NO. 412-1
	SCALE: N.T.S.		

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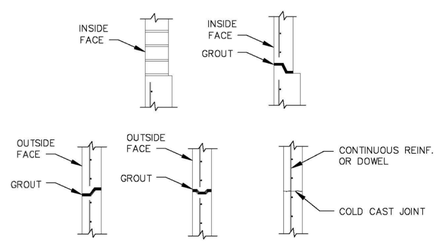

WALL JOINTS

NOTES:

1. ONE OR MORE TYPES OF JOINTS MAY BE USED IN A SINGLE STRUCTURE, EXCEPT BRICK WALL STRUCTURE. BRICK WALL CONSTRUCTION IS PERMITTED ON CIRCULAR UNITS ONLY.
2. ALL GROUTED JOINTS ARE TO HAVE A MAXIMUM THICKNESS OF 1".
3. KEYWAYS ARE TO BE A MINIMUM OF 1 1/2" DEEP.
4. JOINT DOWELS ARE TO BE #4 BARS, 12" LONG WITH A MINIMUM OF 6 BARS PER CIRCULAR STRUCTURES APPROXIMATELY EVENLY SPACED, AND 2 BARS PER SIDE AT APPROXIMATE QUARTER POINTS FOR RECTANGULAR STRUCTURES.
5. MINIMUM COVER ON REINFORCING BARS IS 1 1/4".
6. REBAR STRAIGHT END EMBANKMENT MAY BE USED IN LIEU OF ACI STANDARD HOOKS FOR TOP AND BOTTOM SLABS EXCEPT WHEN HOOKS ARE SPECIFICALLY CALLED FOR IN PLANS OR STANDARD DRAWINGS.
7. JOINTS BETWEEN WALL SEGMENTS AND BETWEEN WALL SEGMENTS AND TOP OR BOTTOM SLABS MAY BE SEALED EITHER BY PREFORMED PLASTIC GASKET MATERIAL OR BY GROUT.
8. APPROVED PRODUCT INSERTS MAY BE USED IN LIEU OF DOWEL EMBEDMENT.

OPTIONAL CONSTRUCTION JOINTS

ENGINEERING STANDARDS 2019			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	OPTIONAL CONSTRUCTION JOINT	DATE: JUNE 1996 DWG. NO. 412-2
	SCALE: N.T.S.		

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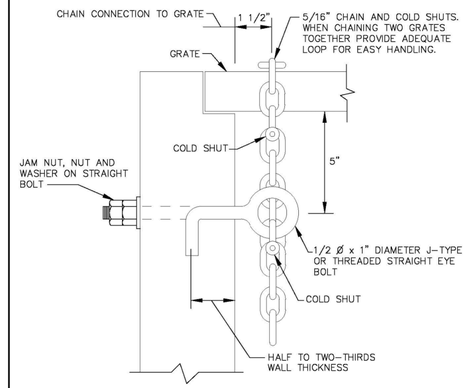

NOTE: WHEN ALTERNATE "G" GRATE IS SPECIFIED, THE CHAIN, BOLT, NUTS, WASHER AND COLD SHUTS SHALL BE GALVANIZED IN ACCORDANCE WITH THE SPECIFICATIONS FOR THE GRATE.

COST OF EYE BOLT AND CHAIN TO BE INCLUDED IN THE CONTRACT UNIT PRICE FOR INLETS.

EYE BOLT AND CHAIN FOR LOCKING GRATES

ENGINEERING STANDARDS 2019			
REVISIONS BY / DATE	ENGINEERING DIVISION CITY OF POMPANO BEACH	EYE BOLT AND CHAIN	DATE: JUNE 1996 DWG. NO. 413-1
	SCALE: N.T.S.		

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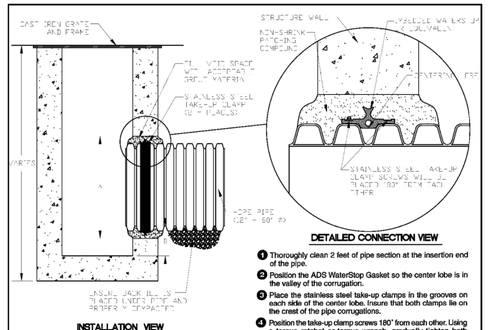

1. Thoroughly clean 2 feet of pipe section at the insertion end of the pipe.
2. Position the ADS WaterStop Gasket so the center lobe is in the valley of the corrugation.
3. Place the stainless steel take-up clamps in the grooves on each side of the center lobe. Insure that both clamps lie on the crest of the pipe corrugations.
4. Position the take-up clamp screws 180° from each other. Using a torque ratchet or torque wrench, gradually tighten both screws of each clamp to 60 lbs./inch torque. Do not overtighten. A screw driver will not tighten clamps adequately.
5. Apply a good quality concrete bonding agent to the structure opening.
6. Insert pipe into the structure opening. Make sure that the ADS WaterStop is fully within the plane of the structure's wall. **If mortaring in place,** apply and compact non-shrink grout around the ADS WaterStop and between the pipe and the opening, taking care to fill the voids. Make sure that the ADS WaterStop Gasket does not contact the bare structure walls. **If pouring in place,** use concrete of sufficient slump to permit complete flow around the pipe and ADS WaterStop. Thoroughly vibrate all around the pipe and ADS WaterStop Gasket to complete compaction and to release any trapped air.

   Allow concrete or mortar to fully cure before testing or backfilling. If the system is to be tested, testing should be completed prior to backfilling around the structure, following all recommendations and requirements of the test system manufacturer. Plug any vent holes in the N-12 pipe prior to testing.
7. Backfill the N-12 pipe following recommendations in ADS Product Note 3.115, *Installing N-12 Storm, Sanitary Sewer and Culvert Pipe.*
8. Product Note 3.115, *Installing N-12 Storm, Sanitary Sewer and Culvert Pipe.*

INSTALLATION RECOMMENDATIONS

PIPE SIZE	PIPE OD (IN) A-PROFILE	PIPE OD (IN) C-PROFILE	"A" MIN. "B" MIN. DISTANCE PIPE INVERT TO STRUCTURE INVERT (IN)
12	14.5	14.8	3.7
15	17.6	17.8	4.6
18	20.8	21.2	4.6
24	27.8	28.4	4.6
30	34.1	35.2	5.6
36	40.1	41.4	5.6
42	47.2	48.0	5.6
48	53.6	54.8	6.4
60	66.9	67.9	6.4

WATER STOP SEAL

ENGINEERING STANDARDS 2019			
REVISIONS BY / DATE: TCW 04-08	ENGINEERING DIVISION CITY OF POMPANO BEACH	WATER STOP SEAL	DATE: APRIL 2008 DWG. NO. 414-1
	SCALE: N.T.S.		

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NO.	REVISIONS	DATE	NO.	REVISIONS	DATE

DESIGNED: WFI DATE: 01/2023
DRAWN: WFI DATE: 01/2023
CHECKED: DATE:
PUBLISHED: 2/22/2023, 10:27:16 AM

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ENGINEERS • PLANNERS • SURVEYORS
111 N.E. 44th STREET, OAKLAND PARK, FL 33334 954-771-7440 FAX: 954-771-0298 www.winfrad.com

PALM AIRE TENNIS CENTER
RWB / LINARES ARCHITECTURE

CITY OF POMPANO BEACH
STANDARD STORM DRAINAGE DETAILS

APPROVED: EB-0002995 LB-0002995
DATE:
PROJECT NUMBER 22-06
SHEET NO. 2 OF 2

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Digitally signed by Bealinda M Pell
DN: c=US, o=Florida, dnQualifier=A01410D0000017FB6C8143E00037A12, cn=Bealinda M Pell
Date: 2023.02.22 10:40:23 -05'00'

Know what's below. Call before you dig.

DRC
PZ23-14000005
06/21/2023