

**HIGHMOUNT CONTAINMENT PROTECTION REQUIREMENT**  
 NEW CONSTRUCTION AND RETROFIT INSTALLATIONS  
 SERVICE SIZE THROUGH 2" METER SIZE THROUGH 2"  
 DOUBLE CHECK VALVE (DCV) ASSEMBLY

SPECIFICATIONS: THE CUSTOMER SHALL FURNISH AND INSTALL A DOUBLE CHECK VALVE ASSEMBLY (DCV) ASSEMBLY IN A SIZE TO MATCH THAT OF THE REQUIRED SERVICE LINE. THE DCV ASSEMBLY SHALL INCLUDE A BALL BEARING VALVE ON THE INLET AND OUTLET SIDES WITH A UNION OR TAPPED COUPLING NUT BETWEEN THE DEVICE AND EACH VALVE. THE DEVICE SHALL HAVE THREE BALL BEARING TEST COCKS IN THE MIDDLE POSITION FITTED WITH BRASS OR PLASTIC COCK. A FURNISH TEST COCK SHALL BE PROVIDED ON THE DOWNSTREAM SIDE OF THE INLET SHUT OFF VALVE. ALL COMPONENTS OF THE ASSEMBLY SHALL BE EQUIPPED IN BRASS OR STAINLESS STEEL CONSTRUCTION AND APPROVED WITH BALL BEARING TEST COCKS. ACCESS TO BOTH CHECKING DEVICES SHALL BE BY 220 AMP/1000 VA CENTER FOR MAINTENANCE AND REPAIR OF ALL INTERIOR PARTS. VALVE HANDLES SHALL TURN UP TO CLOSE AND HANDLED THE OPPOSITE TO OPEN.

NOTE: ALL COMPONENTS OF THE ASSEMBLY SHALL BE CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY. THE DCV DEVICE SHALL HAVE CURRENT APPROVAL FROM THE UNIVERSITY OF SOUTHERN CALIFORNIA, FOUNDATION FOR CROSS CONNECTION CONTROL, AND HYDRALIC RESEARCH (HRC) FOUNDATION. ASSEMBLY TO BE INDIVIDUALLY FACTORY TESTED, SHIPPED AND INSTALLED AS A UNIT.

INSTALLATION INSTRUCTIONS: THE DCV BFP ASSEMBLY SHALL NOT BE BURIED IN EARTH BUT INSTALLED IN A UTILITY BOX ASSEMBLY TO BE OF THE SAME MATERIAL AS THE UTILITY BOX. THE UTILITY BOX SHALL BE INSTALLED IN A UTILITY BOX ASSEMBLY TO BE OF THE SAME MATERIAL AS THE UTILITY BOX. UNDER NO CIRCUMSTANCES WILL ANY CONNECTION BE ALLOWED BETWEEN THE SERVICE METER AND A REPAIR USED FOR SYSTEM CONTAINMENT UNLESS THIS CONNECTION IS APPROVED BY AN APPROVED BFP. AT THE BOTTOM OF THESE INSTRUCTIONS YOU WILL FIND AN EXEMPT FROM THE GEORGIA STATE PLUMBING CODE ON THERMAL EXPANSION.

APPROVED UTILITY BOXES (OR EQUIVALENTS)  
 CONCRETE INDUSTRIES MODEL NO. 123000000  
 FOR SYSTEMS STOP MODEL NO. WA191214-10  
 BROOKS PRODUCTS, INC. MODEL NO. 1234

DEVICE TESTING: ALL DCV ASSEMBLIES SHALL BE TESTED AT TIME OF INSTALLATION AFTER EACH REPAIR AND AT LEAST ANNUALLY THEREAFTER.

INSTALLATION: SUGGESTED CONTACT CROSS-CONNECTION CONTROL SECTION AT 770-414-6100 FOR INSTALLATION INSPECTIONS.

APPROVED DEVICES (OR EQUIVALENTS)  
 CONCRETE 48 INCH DIA. 3" x 4" x 8" x 8"  
 FIBRO 60 INCH DIA. 3" x 4" x 8" x 8"  
 WATERS 60 INCH DIA. 3" x 4" x 8" x 8"  
 WILKENS 90 INCH DIA. 3" x 4" x 8" x 8"

TYPICAL UTILITY BOX INSTALLATION

NOTE: FOR FINAL APPROVAL ASSEMBLY MUST BE CENTERED IN UTILITY BOX.  
 \*\*\* SPECIAL CAUTION \*\*\*

INTERNATIONAL PLUMBING CODE 2009, ADOPTED BY GEORGIA STATE PLUMBING CODE 2007 AND 2008 AMENDMENTS.  
 SECTION 607.3 THERMAL EXPANSION CONTROL.  
 A MEANS OF CONTROLLING INCREASED PRESSURE CAUSED BY THERMAL EXPANSION SHALL BE PROVIDED WHERE REQUIRED IN ACCORDANCE WITH SECTIONS 607.3.1 AND 607.3.2.

607.3.1 PRESSURE-REDUCING VALVE.  
 FOR WATER SUPPLY SYSTEMS SERVING UP TO AND INCLUDING 2 INCHES (51 MM), A DEVICE FOR CONTROLLING PRESSURE SHALL BE INSTALLED WHERE BECAUSE OF THERMAL EXPANSION, THE PRESSURE ON THE DOWNSTREAM SIDE OF A PRESSURE-REDUCING VALVE EXCEEDS THE PRESSURE-REDUCING VALVE SETTING.

607.3.2 BACKFLOW PREVENTION DEVICE OR CHECK VALVE.  
 WHERE A BACKFLOW PREVENTION DEVICE OR OTHER DEVICE IS INSTALLED ON A WATER SUPPLY SYSTEM UTILIZING STORAGE WATER HEATING EQUIPMENT SUCH THAT THERMAL EXPANSION CAUSES AN INCREASE IN PRESSURE, A DEVICE FOR CONTROLLING PRESSURE SHALL BE INSTALLED.

DEKALB COUNTY, GA. DEPARTMENT OF WATERHEAT MANAGEMENT  
 STANDARD DETAILS  
 DCV BFP Installation  
 3/4 inch to 2 inch  
 NOT TO SCALE  
 DETAIL NO. W-016

1 DOUBLE CHECK VALVE  
 C4.1 BACKFLOW PREVENTER  
 N.T.S.

**MINIMUM CONTAINMENT PROTECTION REQUIREMENT**  
 NEW CONSTRUCTION AND RETROFIT INSTALLATIONS NON-HAZARDOUS (DEDICATED) FIRE LINE  
 SERVICE CONNECTION  
 DOUBLE DETECTOR CHECK (DDC) VALVE ASSEMBLY

SPECIFICATIONS: THE CUSTOMER SHALL FURNISH AND INSTALL A DOUBLE DETECTOR CHECK (DDC) VALVE ASSEMBLY (DDC) ASSEMBLY IN A SIZE TO MATCH THAT OF THE REQUIRED FIRE LINE SERVICE CONNECTION. THE DEVICE SHALL HAVE A METERSIZE 2" x 4" x 8" x 8" BY CROSS CONNECTION CONTROL ON THE DOWNSTREAM SIDE. THE DEVICE SHALL BE PROVIDED WITH A RESISTANT TREATED OUTSIDE STEEL AND TYPICAL FLANGED GATE VALVE WITH THE INLET AND OUTLET SIZE OF THE SERVICE. THE GATE VALVE SHALL BE PROVIDED WITH THREE BRASS BALL BEARING TEST COCKS FITTED WITH BRASS OR PLASTIC COCK. ACCESS TO BOTH CHECKING DEVICES SHALL BE BY 220 AMP/1000 VA CENTER FOR MAINTENANCE AND REPAIR OF ALL INTERIOR PARTS. VALVE HANDLES SHALL TURN UP TO CLOSE AND HANDLED THE OPPOSITE TO OPEN.

NOTE: ALL COMPONENTS OF THE ASSEMBLY SHALL BE CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY AND FACTORY TESTED. THE CHECKING DEVICES SHALL HAVE APPROVALS AND CONFORM TO ALL CURRENT REQUIREMENTS OR THE UNIVERSITY OF SOUTHERN CALIFORNIA, FOUNDATION FOR CROSS CONNECTION CONTROL, AND HYDRALIC RESEARCH (HRC) FOUNDATION. ASSEMBLY TO BE INDIVIDUALLY FACTORY TESTED, SHIPPED AND INSTALLED AS A UNIT.

INSTALLATION INSTRUCTIONS: THE DDC BFP ASSEMBLY SHALL NOT BE BURIED IN EARTH BUT INSTALLED BELOW GROUND AS NEEDED UNDER NO CIRCUMSTANCES WILL ANY CONNECTION BE ALLOWED ON THE SYSTEM OTHER THAN FOR FIRE FIGHTING OR THE PROTECTION PURPOSES.

DDC BFP ASSEMBLY SHALL BE TESTED AT TIME OF INSTALLATION AFTER EACH REPAIR AND AT LEAST ANNUALLY THEREAFTER.

PLAN APPROVALS AND INSPECTIONS MUST BE OBTAINED AND SCHEDULED PRIOR TO WORK THROUGH DEKALB COUNTY DEPARTMENT OF WATERHEAT MANAGEMENT. CONTACT CROSS-CONNECTION CONTROL SECTION AT 770-414-6100 FOR INSTALLATION INSPECTION.

APPROVED DEVICES (OR EQUIVALENTS)  
 CONCRETE 48 INCH DIA. 3" x 4" x 8" x 8"  
 FIBRO 60 INCH DIA. 3" x 4" x 8" x 8"  
 WATERS 60 INCH DIA. 3" x 4" x 8" x 8"  
 WILKENS 90 INCH DIA. 3" x 4" x 8" x 8"

VALVE SPECIFICATIONS:  
 (1) GATE VALVE SHALL BE PRECAST CONCRETE WITH A MINIMUM THICKNESS OF AT LEAST 8".  
 (2) GATE VALVE SHALL BE SUPPORTED AT LEAST 12" FROM THE GROUND.  
 (3) GATE VALVE SHALL BE INSTALLED ON OWNER'S PREMISE PROPERTY.  
 (4) GATE VALVE SHALL BE INSTALLED ON OWNER'S PREMISE PROPERTY.  
 (5) ALL MATERIALS TO BE FURNISHED BY THE CUSTOMER.

TYPICAL VALVE INSTALLATION (MINIMUM CLEARANCE DIMENSIONS)

DEKALB COUNTY, GA. DEPARTMENT OF WATERHEAT MANAGEMENT  
 STANDARD DETAILS  
 DDC BFP Installation  
 Non-hazardous Fire Line Installation  
 NOT TO SCALE  
 DETAIL NO. W-012

2 DOUBLE CHECK VALVE  
 C4.1 BACKFLOW PREVENTER FOR FIRE LINE  
 N.T.S.

TYPICAL GATE VALVE INSTALLATION

DEKALB COUNTY, GA. DEPARTMENT OF WATERHEAT MANAGEMENT  
 STANDARD DETAILS  
 Typical Gate Valve Installation  
 NOT TO SCALE  
 DETAIL NO. 11/07

3 GATE VALVE  
 C4.1 N.T.S.

FIG. 1 COMPLETED JOINT BEFORE OFFSET

FIG. 2 COMPLETED JOINT AFTER OFFSET

TYPE JOINT	PIPE SIZE	PIPE DEPTH	MAXIMUM ANGLE OF DEFLECTION	MAXIMUM OFFSET	RADIUS OF CURVATURE
FLANGE	6" - 8"	18"	5°	19"	205'
SLIP	16"	12"	4°	10"	175'
SLIP	16"	18"	4°	15"	280'

NOTE: ALL JOINTS MUST BE ASSEMBLED AS SHOWN IN FIG. 1 BEFORE MAKING DEFLECTION.

DEKALB COUNTY, GA. DEPARTMENT OF WATERHEAT MANAGEMENT  
 STANDARD DETAILS  
 Maximum Allowable Offsets and Deflections  
 NOT TO SCALE  
 DETAIL NO. 11/07

4 WATERMAIN OFFSETS & DEFLECTIONS  
 C4.1 N.T.S.

TYPICAL FIRE HYDRANT TAP INSTALLATION

DEKALB COUNTY, GA. DEPARTMENT OF WATERHEAT MANAGEMENT  
 STANDARD DETAILS  
 Typical Fire Hydrant Tap Installation  
 NOT TO SCALE  
 DETAIL NO. 07/08

5 FIRE HYDRANT TAP  
 C4.1 N.T.S.

LEGEND - HYDRANT BONNET COLORS

NOTE: COLOR CODE FOR FIRE HYDRANTS ALONG STREETS DEPENDANT ON SIZE OF WATER MAIN AND IF WATER MAIN DEAD ENDS.

CIRCULATED WATER MAINS

UNCIRCULATED WATER MAINS - DEAD ENDS

DEKALB COUNTY, GA. DEPARTMENT OF WATERHEAT MANAGEMENT  
 STANDARD DETAILS  
 Color Code For Fire Hydrants  
 NOT TO SCALE  
 DETAIL NO. 11/07

6 FIRE HYDRANT COLOR CODE  
 C4.1 N.T.S.

UNIMPROVED CONDITION

IMPROVED CONDITION

NOTE:  
 1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES 16" AND LARGER, OR AS REQUIRED BY DCOM.  
 2. VALVE COLLAR DIMENSIONS MAY BE REDUCED TO 16" x 16" x 6" WHEN THE BRONZE IDENTIFICATION DISC IS NOT REQUIRED.

DEKALB COUNTY, GA. DEPARTMENT OF WATERHEAT MANAGEMENT  
 STANDARD DETAILS  
 Valve Cover and Marker Disc  
 NOT TO SCALE  
 DETAIL NO. 11/07

7 VALVE COVER & MARKER  
 C4.1 N.T.S.

UTILITY DETAILS - WATER

SKYLINE

City of Dunwoody

Baseball Facilities at Brook Run Park

UTILITY DETAILS

DESIGNED BY: MDC  
 DRAWN BY: BKJ  
 CHECKED BY: BKJ  
 DATE: 04/12/2017

PROJECT NO. 11/07  
 DRAWING TITLE: UTILITY DETAILS  
 SHEET: C-4.1

REVISION

DATE

BY

SYMBOL