

ANVIL
INTERNATIONAL, INC.

Design Services

Anvil Design Services offers both Basic and Extended Services...

**Contact your Anvil representative
for more information.**

Basic Services

Anvil Design Services produces fabrication drawings of mechanical room piping 2½" and larger including chillers, heat exchangers, boilers, and pumps from contractor supplied flow diagrams, mechanical drawings, and approved submittals and specifications.

The drawings include a Bill of Materials with tags referencing the components in the mechanical room. The piping is color coded by service and is represented in 3-D with plan, isometric, and elevation views.

Initially, Anvil personnel meet with you to determine your piping preferences. The project scope and fee is agreed upon in a Design Services contract.

The plans and specifications are then interpreted in terms of economy, accuracy, and compliance. We may suggest modifications in arrangement, construction, equipment location, or product to attain the desired results. Piping layouts are carefully analyzed to determine whether further economies can be attained in the piping system.

Piping drawings are then prepared to determine the most efficient pipe routing, taking equipment location and any interferences into consideration. Preliminary prints are sent to you for revision or approval.

Upon approval, (4) sets of drawings with tags and Bills of Materials of the included system components are sent to you. Copies of the electronic data file of the project drawings are available at no extra charge. This brochure is an example of the finished product.

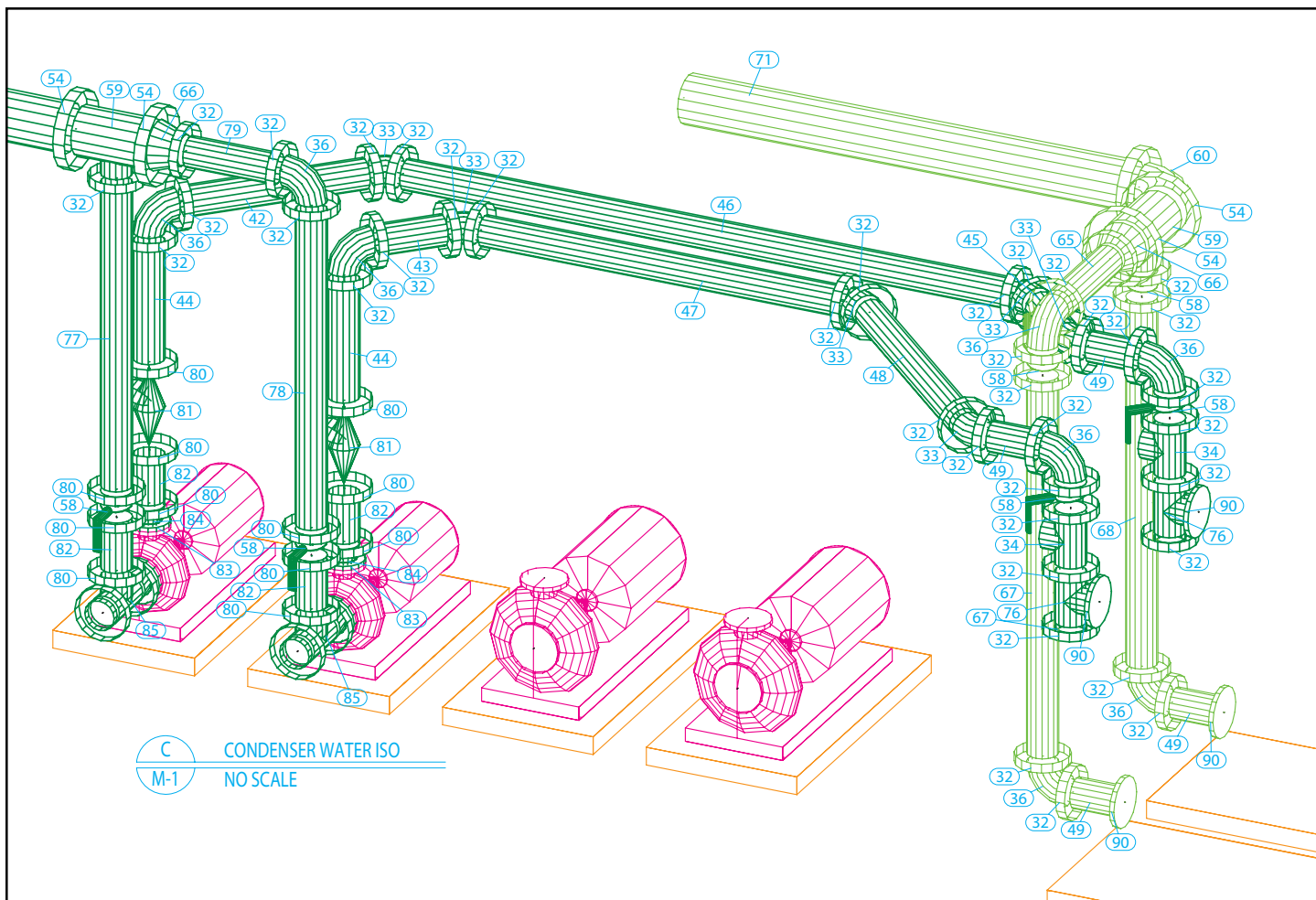
With Basic Services, you can plan the mechanical room. The preliminary drawings can be taken to coordination meetings with other trades to "reserve" space by "getting in" first. Also, your field supervisor can spend more time supervising and not calculating pipe lengths and pipe routing. The components can be grouped from the finished drawings for better workflow planning.

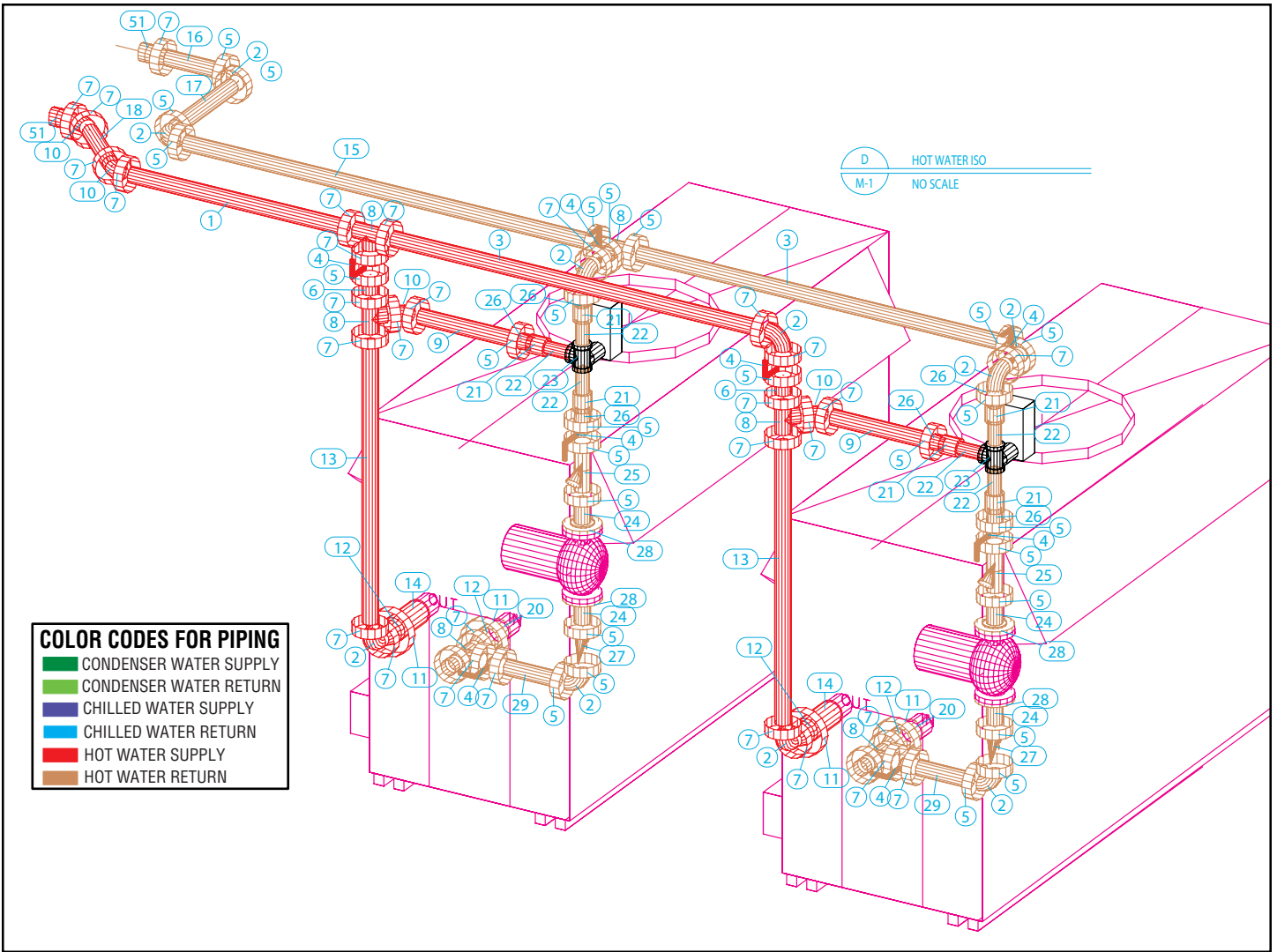
We usually reduce fitting counts by 10%-15% by moving equipment whenever possible, usually less than a foot. The more movement that is allowed, the more savings can be realized.

Extended Services:

Extended Services include any scope beyond Basic Services. There are many different types of services offered as extended:

- BOM by component (pump, chiller) or by system
- Unique Tagging – adding unique tags to individual components
- Air Handling Units – with associated ductwork
- Single Line Routing – non-dimensional
- Distribution Piping
- Dimensioned Floor Penetrations
- AWWA Piping - Total Scope
- Commercial Piping
- Oil Field Piping
- Retrofit Projects - Field Survey
- Hybrid Systems
- Anything Else





■	CONDENSER WATER SUPPLY
■	CONDENSER WATER RETURN
■	CHILLED WATER SUPPLY
■	CHILLED WATER RETURN
■	HOT WATER SUPPLY
■	HOT WATER RETURN

PIPE

Qty	Tag#	Size	End Type	Pipe Length
1	1	2.5	GRVxGRV	5'-4 7/8"
2	3	2.5	GRVxGRV	6'-2 3/4"
2	6	2.5	GRVxGRV	4 1/4"
2	9	2.5	GRVxGRV	1'-8 13/16"
2	13	2.5	GRVxGRV	4'-7 3/8"
2	14	4	GRVxTHD	10 5/16"(FIELD FIT)
1	15	2.5	GRVxGRV	8'-7 1/4"
1	16	2.5	GRVxGRV	1'-0 7/16"
1	17	2.5	GRVxGRV	1'-8 7/8"
1	18	2.5	GRVxGRV	1'-3 1/8"
2	20	4	GRVxGRV	6"
6	22	2	THDXGRV	6"(FIELD FIT)
4	24	2.5	GRVxGRV	6"
2	29	2.5	GRVxGRV	1'
1	30	6	GRVxGRV	4'-5 1/8"
1	31	6	GRVxGRV	1'-6 5/16"
1	35	6	GRVxGRV	3'-2 3/4"
1	37	6	GRVxGRV	4 5/8"
1	38	6	GRVxGRV	1'-5 5/16"
1	39	6	GRVxGRV	5'-10"
1	40	6	GRVxGRV	4'-4 7/8"
1	41	6	GRVxGRV	4'-2 3/8"
1	42	6	GRVxGRV	3'-5 1/8"
1	43	6	GRVxGRV	1'-3 11/16"

PIPE

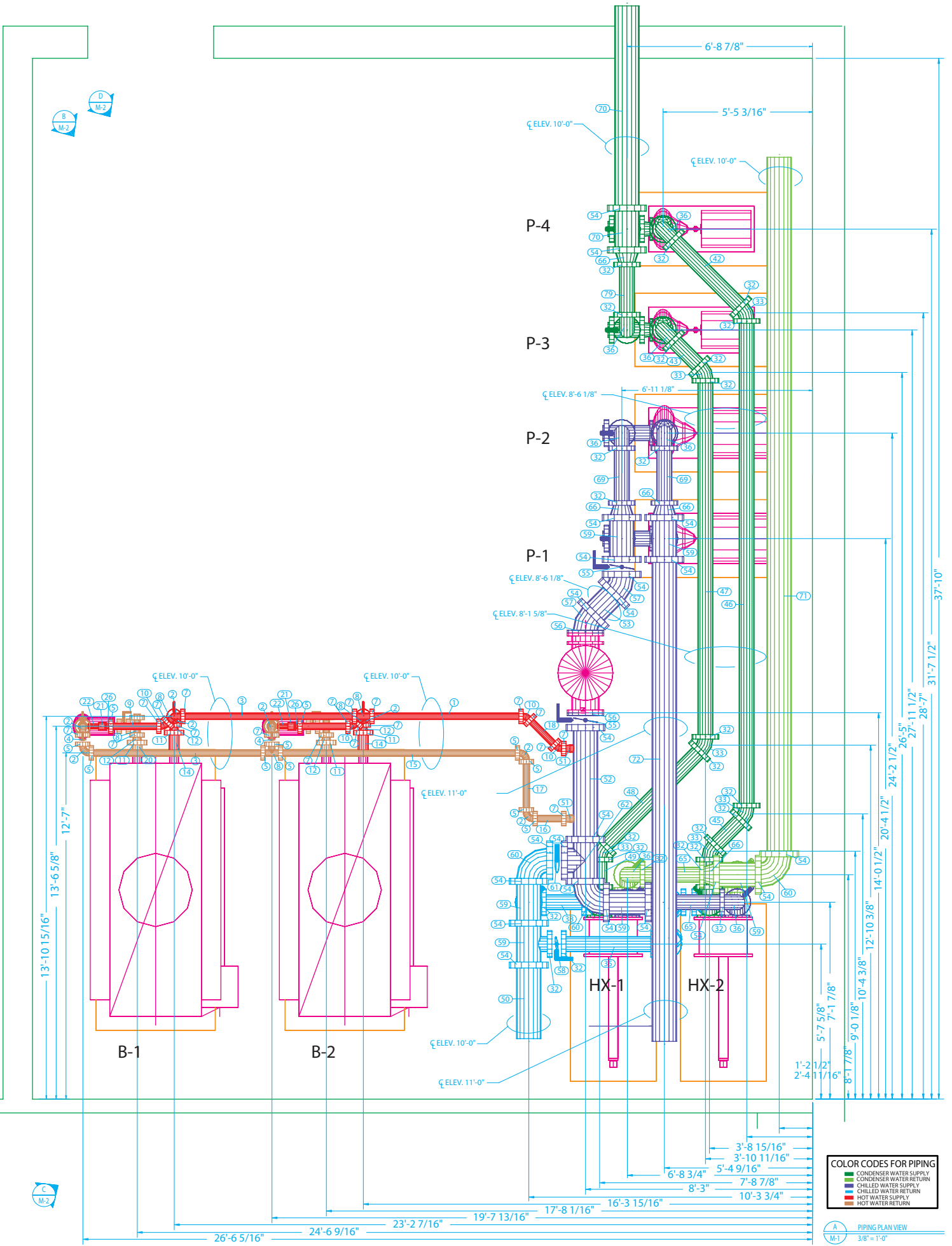
Qty	Tag#	Size	End Type	Pipe Length
2	44	6	GRVxGRV	2'-4 1/4"
1	45	6	GRVxGRV	1'-3 1/2"
1	46	6	GRVxGRV	17'-7 1/8"
1	47	6	GRVxGRV	12'-11 1/8"
1	48	6	GRVxGRV	4'-9 15/16"
4	49	6	GRVxGRV	11 3/4"
1	50	10	GRVxGRV	2'-9 3/16"
1	52	10	GRVxGRV	4'-0 9/16"
1	53	10	GRVxGRV	1'-0 7/16"
1	63	6	GRVxGRV	2'-8 7/8"
1	64	6	GRVxGRV	2'-11 3/8"
2	65	6	GRVxGRV	2'-1 5/8"
1	67	6	GRVxGRV	7'-1 3/4"
1	68	6	GRVxGRV	6'-11 1/4"
2	69	6	GRVxGRV	1'-11 5/8"
1	70	10	GRVxGRV	7'-5 1/4"
1	71	10	GRVxGRV	25'-4 7/8"
1	72	10	GRVxGRV	17'-7 1/4"
1	73	6	GRVxGRV	4'-7 1/4"
1	74	6	GRVxGRV	4'-9 3/4"
1	77	6	GRVxGRV	5'-10 1/4"
1	78	6	GRVxGRV	6'-0 3/4"
1	79	6	GRVxGRV	1'-9 5/8"
8	82	6	GRVxGRV	1'

FITTINGS

Qty	Tag#	Size	PART#	DESCRIPTION #1	DESC. #2
10	2	2.5	Gruvlok, Fig.7050	90 ELBOW, GRVD	290390014249
27	5	2.5	Gruvlok, Fig.7000	COUPLING, FLEX GRVD.	
32	7	2.5	Gruvlok, Fig.7400	COUPLING, RIGIDLK GRVD.	290390013522
6	8	2.5	Gruvlok, Fig.7060	TEE, GROOVED	290390016822
4	10	2.5	Gruvlok, Fig.7051	45 ELBOW, GRVD	290390014801
4	11	4	Gruvlok, Fig.7400	COUPLING, RIGIDLK GRVD.	290390013548
4	12	4x2.5	Gruvlok, Fig.7072	4x2.5" GRVD CONC REDUCER	290390028645
2	19	2.5	Gruvlok, Fig.7074	CAP, GRVD	290390030161
6	21	2		COUPLING, THRD	
2	23	2		TEE, THRD	
6	26	2.5x2	Gruvlok, Fig.7076	2.5x2" GRVD CONC REDUCER	290390028413
4	28	2.5	Gruvlok, Fig.7012	GRVD. FLANGE ADAPT.	290390020102
73	32	6	Gruvlok, Fig.7400	COUPLING, RIGIDLK GRVD.	290390013563
8	33	6	Gruvlok, Fig.7051	45 ELBOW, GRVD	290390014942
18	36	6	Gruvlok, Fig.7050	90 ELBOW, GRVD	290390014363
2	51	10x2.5		GROOVE-O-LET	
22	54	10	Gruvlok, Fig.7400	COUPLING, RIGIDLK GRVD.	290390013589
2	56	10	Gruvlok, Fig.7012	GRVD. FLANGE ADAPT.	290390020126
2	57	10	Gruvlok, Fig.7051	45 ELBOW, GRVD	290390014983
7	59	10x6	Gruvlok, Fig.7061	REDUCING TEE, GROOVED	290390019065
3	60	10	Gruvlok, Fig.7050	90 ELBOW, GRVD	290390014405
1	62	10	Gruvlok, Fig.7060	TEE, GROOVED	290390016962
5	66	10x6	Gruvlok, Fig.7072	10x6" GRVD CONC REDUCER	290390029429
2	75	6	Gruvlok, Fig.7074	CAP, GRVD	290390030302
2	76	6	Gruvlok, Fig.7060	TEE, GROOVED	290390016921
24	80	6	Gruvlok, Fig.7000	COUPLING, FLEX GRVD.	
2	83	4	Gruvlok, Fig.7012	GRVD. FLANGE ADAPT.	290390020110
2	84	6x4	Gruvlok, Fig.7072	6x4" GRVD CONC REDUCER	290390028967
2	86	5	Gruvlok, Fig.7012	GRVD. FLANGE ADAPT.	290390020114
2	87	6x5	Gruvlok, Fig.7072	6x5" GRVD CONC REDUCER	290390029007
8	90	6	Gruvlok, Fig.7012	GRVD. FLANGE ADAPT.	290390020118

VALVES

Qty	Tag#	Size	Part#	DESCRIPTION #1
8	4	2.5	Gruvlok, Ser.7000	BUTTERFLY VALVE, GRVD
2	25	2.5	Gruvlok, Fig.758	STRAINER, GROOVED
2	27	2.5	Gruvlok, Ser.7800	CHECK VALVE, GRVD
4	34	6	Gruvlok, Fig.7260	STRAINER, GROOVED
2	55	10	Gruvlok, Ser.7000	BUTTERFLY VALVE, GRVD
12	58	6	Gruvlok, Ser.7000	BUTTERFLY VALVE, GRVD
1	61	10	Gruvlok, Ser.7000	BUTTERFLY VALVE, GRVD
4	81	6	Gruvlok, Fig.722G	3DTY VALVE, GROOVED
2	85	6x5	Gruvlok, Fig.7250	SUCTION DIFF, GROOVED
2	89	6	Gruvlok, Fig.7250	SUCTION DIFF, GROOVED



COLOR CODES FOR PIPING	
█	CONDENSER WATER SUPPLY
█	CONDENSER WATER RETURN
█	CHILLED WATER SUPPLY
█	CHILLED WATER RETURN
█	HOT WATER SUPPLY
█	HOT WATER RETURN

PIPING PLAN VIEW
3/8" = 1'-0"



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ANVIL MANAGEMENT TEAM

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Ken Dangelmaier *Vice President, Sales and Marketing*

Bob Arison *Regional Vice President*
Hugh Brennan *Regional Vice President*
Ernie Chuter *Director, Marketing*
Laura DiLiegro *Director, Human Resources*
John Martin *Vice President, National Accounts*
Leigh Porter *Regional Vice President*
Ron Pound *Director, National Operations*
William Strouss *Vice President, Finance*
Tom Ward *Regional Vice President*

ANVIL MANUFACTURED PRODUCTS

Statesboro, GA Foundry

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Statesboro, GA 30459
Tel: 912-587-2212 • 912-587-2261
Bob Kim — Plant Manager

Columbia, PA Foundry

1411 Lancaster Avenue
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Paul Benos — Plant Manager

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Ray Mullenix — Plant Manager

North Kingstown, RI Plant

160 Frenchtown Road
North Kingstown, RI 02852
Tel: 401-886-3001 • Fax: 401-886-3010
Robert Taylor — Plant Manager

ENGINEERED PIPE SUPPORTS

- Structural Fabrication
 - Field Services
 - Non-destructive Testing
- Contact: North Kingstown, RI Plant
401-886-3001

ANVIL RESEARCH AND DEVELOPMENT

20 Thurber Avenue
Smithfield, RI 02917

NORTH EAST REGION

Regional Service Center: Servicing Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, East Pennsylvania, Rhode Island, Vermont
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1234 Route 23 North
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SOUTH EAST REGION

Regional Service Center: Servicing Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, Virginia
6344 Cash Court
Norcross, GA 30071
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1202 Tech Blvd., Suite 103
Tampa, FL 33619
Tel: 800-429-0703 • Fax: 813-663-0811

MID WEST REGION

Regional Service Center: Servicing Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, West Pennsylvania, South Dakota, West Virginia, Wisconsin
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University Park, IL 60466
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Hugh Brennan — Regional Vice President

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Bob Arison — Regional Vice President

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