

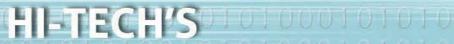


PVC / CLEAR PVC / CPVC PIPE / FITTING











大發管材工業股份有限公司 DURA FLOW PIPE IND. CO., LTD.



公司(工廠)/435台中市梧棲區緯六路8號(經濟部台中港加工出口區) HEAD OFFICE

No.8, Wei 6th Rd., Wu Chi Dist., Taichung City 435, Taiwan (R.O.C.)



台北分公司 / Tel: 886-2-2778 2186 Fax: 886-2-2778 2190

高雄分公司 / Tel: 886-7-788 8678 Fax: 886-7-787 0109

高 雄 工 廠 / 831高雄市大寮區(大發工業區)華中路19號

Tel: 886-7-787 7788 Fax: 886-7-787 7869

E-mail: info@dfppipe.com.tw Http://www.duraflow.com.tw











Operation Philosophy

Since 1973, first thermoplastic valves manufacturer in Taiwan, SH has been specializing in the R&D, and Production of valves. For the past 40 years, we've been in the lead in product quality with state-of-the-art technology and process. Our products, sold in more than 40 countries worldwide, are extensively used and applied in a wide variety of piping system, gaining a good reputation as a reliable supplier.



President TSAI TIEN-SHOU

SH people, committed to the five beliefs all the time----HONESTY, RELIABILITY, RESPONSIBILITY, COURTESY and HONOUR----working together as responsible and reliable team, are leaded by a group of resilient and determined leaders, and dedicated to design, innovation, and quality increase with business growth. In order to ensures high quality products, we have been successfully certified by NSF(American National Sanitation Federation), ISO9001, China National Standard (CNS) Environmental marking quality assurances to provide the reliable industry products to the customers in the global world.





Four main product features

At the same time, we are continually adding to our existing comprehensive product line, actively taking advantage of advanced technique to improve process. We have made a breakthrough in production of large-sized thermoplastic valves, check valves and pipes, fittings, making us the most complete product line for the industry demands. Our products own the 4 distinctive features:

The First feature: The complete production materials. Offering UPVC, HIW-PVC, CPVC, (HT-CPVC), HD-PE, PP-H, ABS PVDF several material products. The only company in the world which run the 7 different materials in one production site.

The second feature: The complete production sizes and the largest production size: The available product size: UPVC 1/2"-24", HIW-PVC: 1/2"-24", CPVC(HI-PVC): 1/2"-24", HD-PE: Ø12~Ø1200mm, ABS, PVDF: Ø12~Ø800mm. The production dimension standards: JIS(Japanese), ANS SCH80, SCH40(American), DIN PN2.5~PN30(European). BS(British), and customer appointed special dimension is also available.

The third feature: One stop manufacturing supplier- Pipe, fittings and valves in one manufacturer. We are providing the full customer demands.

The forth feature: Our product has the following special characters:

- 1. The world larges thermoplastic butterfly by one-piece molded for the sizes: 28", 32", 36", 40", 48" and owned patent in Taiwan and under applying China, Japan, America and Korean patent.
- The largest UPVC, CPVC SCH80 14", 16", 18", 20", 24" coupling,90D elbow, 45D elbow, Tee are in one-piece molded. Enhance our all around techniques, upgrade the thermoplastic valve pressure resistant rates. Some products have been up form 10kgf/cm2 to 15kgf/cm2. This is the pioneering task.

We provide our customers with the best products by integration of knowledge in today's marketplace, our business experience innovation and precise production techniques.



Quality Control

Based on our belief in quality first, we are certified by BSI 9001, CNS and NSF and use ISO 9001 as the basis of our quality management system into which technical specifications set up by our professional engineers for each stage of production procedures have been integrated, We take into consideration a total quality assurance program that includes material selection, self inspection, operation standard procedures improvement, spot inspection and 100% valve pressure test. All the manufactured pipes, fittings are complied with ASTM, ISO, DIN and CNS national standards. Our manufacturing facilities, personnel, processes and procedures are monitored by the total quality managment system to ensure they are in conformance with applicable standards, Our current quality certifications are -CNS(China National Standards), NSF(American Sanitary Federal) and Environmental mark certified, all of the products are inspected by the strict regulations.

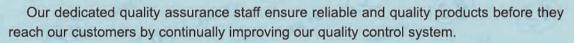


Raw materials storage area.









In order to ensure that all our products are reliable and customer satisfaction is achieved, we have been dedicated to provide the premium quality for our custromers for the past 30 years.







Fulling hammer resistance device

Customer Satisfaction

Based on long-term trust of our customers and our belief in the value of providing customers with satisfying products, SH has been dedicated to close and mutually beneficial relationships with our customers worldwide.

As one of the most important suppliers of thermoplastic valves, fittings, and pipes in the world, we continually enhance our core value of providing our customers with the best service through staff participation at all levels. As one of the most reliable business partner of our worldwide customers, we play an important and supporting role all the time when our customers encounter severe chanllenges and stiff competition. We believe that customer's success is our success. Thus, SH, committed to a siprit of working for customer's success, has been receiving customer's support and satisfaction for the past 30 years.



TABLE OF CONTENTS

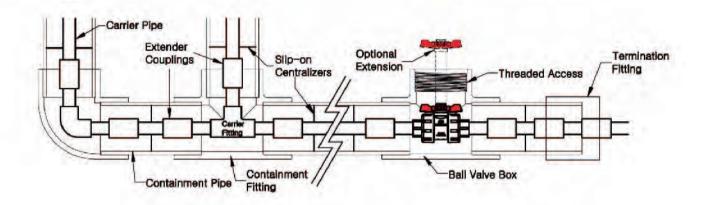
Company Profile	1
General	
Double Containment System Solutions Size of DC Piping Material of DC Piping	7 7 8
DC 90° Elbow	
DC UPVC Sch80 * UPVC Sch80 Clear DC UPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * CPVC Sch80 DC CPVC Sch80 * CPVC Sch80 DC CPVC Sch80 * UPVC Sch80 Clear	9
DC 45° Elbow	
DC UPVC Sch80 * UPVC Sch80 Clear DC UPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * CPVC Sch80 DC CPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * UPVC Sch80 Clear	10
DC Tee	
DC UPVC Sch80 * UPVC Sch80 Clear DC UPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * CPVC Sch80 DC CPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * UPVC Sch80 Clear	_ 11
DC Coupling	
DC UPVC Sch80 * UPVC Sch40 Clear DC UPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * CPVC Sch80 DC CPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * UPVC Sch40 Clear	12
DC Termination Fittings	
DC UPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * UPVC Sch80 DC CPVC Sch80 * CPVC Sch80	13
DC Centralizers (Carrier * Containment)	
DC Sch80 O.D. * UPVC Sch80 DC Sch80 O.D. * CPVC Sch80 DC Sch80 O.D. * Clear Sch40 or ECO Clear	14
Double Containment Pipes	
UPVC SCH40 Clear Pipe UPVC ECO Clear Pipe UPVC Schedule80 Pipe CPVC Schedule80 Pipe	15



Double Containment Systems

Double Containment System Solutions

Double Containment systems are easy to install and most economical and reliable methods for protecting against leaking of dangerous fluid or corrosive from the main piping system. Personal safety and environmental concerns are top priorities on today's industrial agenda. So, the double containment systems are highly using for the verity planets' choice.



DFP Double Containment (DC) fittings are constructed from standard fittings that are to be assembled on the jobsite. It works with standard pipe for both carrier and containment lines. Basically, the standard DC fittings include DC tee, DC elbow (90° and 45°), coupling, termination fitting and centralizer, etc.

Carrier fittings are equipped with extender coupling for connection the carrier pipe. Centralizer is the slip-on type which used on the carrier pipe to support this assembly inside the containment pipe. It allows the carrier fitting to float within the containment fitting. Allowing the ease of movement for installation while reducing problems associated with thermal expansion and contraction during operating the system. The DFP Centralizers offer a vast range of size, material to meet specific requirements.

Size of DC piping

Standard range of DC carrier x containment size are available as follow. Carrier/Containment /(carrier size – inch): UPVC SCH.80/ UPVC SCH.80 (1/2" ~12") CPVC SCH.80/UPVC SCH.80 (1/2" ~ 12"), CPVC SCH.80/CPVC SCH.80(1/2"~12") UPVC SCH.80/UPVC ECO Clear (1/2" ~ 8") and CPVC SCH.80/UPVC ECO Clear (1/2" ~8"), Additional size is available on requested.



Double Containment System

Material of DC piping

Piping and fittings material could be available as: Carrier pipe &fittings—dark grey UPVC Sch.80, light grey CPVC Sch.80. Containment pipe & fittings—dark grey UPVC Sch.80, light grey CPVC Sch.80, clear UPVC Sch.40, and upvc ECO clear pipe DFP double containment is for a wide range of application, such as waste water or water treatment or chemical delivery, microelectronics, metal working/finishing dosingandprocessing, waste collections andmany others.

Remarks:

- UPVC Sch.40 and Sch. pipes meets ASTM D1785
- CPVC Sch.40 and Sch.80 pipes meets ASTM F441.
- The dimension of DFP UPVC and CPVC Sch.80 fittings meet or exceed the requirement of ASTM D-2464 (threaded type) and D-2467 (socket type).
- DFP UPVC and CPVC Sch.80 products are conformed the requirement of NSF/ANSI standard 14 and ISO 9001 certified.

Pressure rating

In general DFP DC carrier pipe and fittings are suitable for full Sch.80 pressure application except where limited by some system component with lower pressure rating like manual/actuated valves and instrumentation fittings.

DFP DC fittings (e.g. elbows, tees. etc) consist of separate internal carrier and externalcontainment fittings. Carrier fittings are equipped with extender coupling to facilitate cement assembly. Centralizers are used inside the containment piping system(but not inside the fittings) in order to allow movement of the carrier assembly inside the containment system

The DFP termination fittings make terminating double wall pipework simple by combing all pipework and fitting components into a single piece. For the DFP DC fittings are all pre-fabricated to an internal extender coupling for connection to existing carrier system, so terminating the double containment portion of the system.

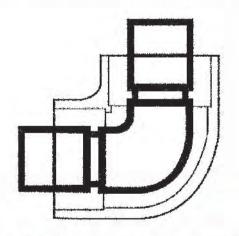
Additional specialty configurations can be custom produced accordingly to user requirements.



Double Containment Fittings 90°Ells

DC 90°Ells	
UPVC Sch80 x UF	VC Sch 80 Clear
CODE	SIZE
1112-DL9-015050	1/2" x 2"
1112-DL9-020080	3/4" x 3"
1112-DL9-025080	1" x 3"
1112-DL9-040100	1-1/2" x 4"
1112-DL9-050100	2" x 4"
1112-DL9-080150	3" x 6"
1112-DL9-100200	4" x 8"

DC 90°Ells UPVC Sch80 x UPVC Sch 80	
CODE	SIZE
1111-DL9-015050	1/2" x 2"
1111-DL9-020080	3/4" x 3"
1111-DL9-025080	1" x 3"
1111-DL9-040100	1-1/2" x 4"
1111-DL9-050100	2" x 4"
1111-DL9-080150	3" x 6"
1111-DL9-100200	4" x 8"
1111-DL9-150250	6" x 10"
1111-DL9-200300	8" x 12"



DC 90°Ells	
CPVC Sch80 x UPVC Sch 80	
CODE	SIZE
4111-DL9-015050	1/2" x 2"
4111-DL9-020080	3/4" x 3"
4111-DL9-025080	1" x 3"
4111-DL9-040100	1-1/2" x 4"
4111-DL9-050100	2" x 4"
4111-DL9-080150	3" x 6"
4111-DL9-100200	4" x 8"
4111-DL9-150250	6" x 10"
4111-DL9-200300	8" x 12"

DC 90°Ells CPVC Sch80 x CPVC Sch 80	
CODE SIZE	
4141-DL9-015050	1/2" x 2"
4141-DL9-020080	3/4" x 3"
4141-DL9-025080	1" x 3"
4141-DL9-040100	1-1/2" x 4"
4141-DL9-050100	2" x 4"
4141-DL9-080150	3" x 6"
4141-DL9-100200	4" x 8"
4141-DL9-150250	6" x 10"
4141-DL9-200300	8" x 12"

DC 90°Ells CPVC Sch80 x UPVC Sch 80 Clear	
CODE	SIZE
4112-DL9-015050	1/2" x 2"
4112-DL9-020080	3/4" x 3"
4112-DL9-025080	1" x 3"
4112-DL9-040100	1-1/2" x 4"
4112-DL9-050100	2" x 4"
4112-DL9-080150	3" x 6"
4112-DL9-100200	4" x 8"

DC 90° Ells are made from standard pressure fittings by DFP in designated material and schedule selected. Included are separate internal carrier and external containment fittings of the same configuration.

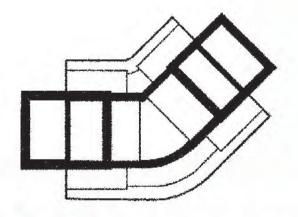
Carrier fittings are equipped with extenders to facilitate cement assembly .



Double Containment Fittings 45°Ells

DC 45°Ells	
UPVC Sch80 x UP	VC Sch 80 Clear
CODE	SIZE
1112-DL4-015050	1/2" x 2"
1112-DL4-020080	3/4" x 3"
1112-DL4-025080	1" x 3"
1112-DL4-040100	1-1/2" x 4"
1112-DL4-050100	2" x 4"
1112-DL4-080150	3" x 6"
1112-DL4-100200	4" x 8"

DC 45°Ells UPVC Sch80 x UPVC Sch 80	
CODE	SIZE
1111-DL4-015050	1/2" x 2"
1111-DL4-020080	3/4" x 3"
1111-DL4-025080	1" x 3"
1111-DL4-040100	1-1/2" x 4"
1111-DL4-050100	2" x 4"
1111-DL4-080150	3" x 6"
1111-DL4-100200	4" x 8"
1111-DL4-150250	6" x 10"
1111-DL4-200300	8" x 12"



DC 45°Ells CPVC Sch80 x UPVC Sch 80	
CODE	SIZE
4111-DL4-015050	1/2" x 2"
4111-DL4-020080	3/4" x 3"
4111-DL4-025080	1" x 3"
4111-DL4-040100	1-1/2" x 4"
4111-DL4-050100	2" x 4"
4111-DL4-080150	3" x 6"
4111-DL4-100200	4" x 8"
4111-DL4-150250	6" x 10"
4111-DL4-200300	8" x 12"

DC 45°Ells	
CPVC Sch80 x CPVC Sch 80	
CODE	SIZE
4141-DL4-015050	1/2" x 2"
4141-DL4-020080	3/4" x 3"
4141-DL4-025080	1" x 3"
4141-DL4-040100	1-1/2" x 4"
4141-DL4-050100	2" x 4"
4141-DL4-080150	3" x 6"
4141-DL4-100200	4" x 8"
4141-DL4-150250	6" x 10"
4141-DL4-200300	8" x 12"

DC 45°Ells CPVC Sch80 x UPVC Sch 80 Clear	
CODE	SIZE
4112-DL4-015050	1/2" x 2"
4112-DL4-020080	3/4" x 3"
4112-DL4-025080	1" x 3"
4112-DL4-040100	1-1/2" x 4"
4112-DL4-050100	2" x 4"
4112-DL4-080150	3" x 6"
4112-DL4-100200	4" x 8"

DC 45° Ells are made from standard pressure fittings by DFP in designated material and schedule selected. Included are separate internal carrier and external containment fittings of the same configuration.

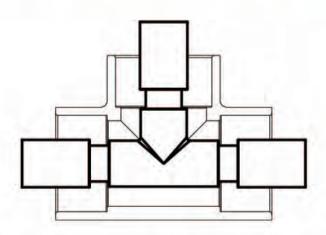
Carrier fittings are equipped with extenders to facilitate cement assembly .



Double Containment Fittings **TEES**

DC TEE UPVC Sch80 x UPVC Sch 80 Clear	
CODE	SIZE
1112-DTT-015050	1/2" x 2"
1112-DTT-020080	3/4" x 3"
1112-DTT-025080	1" x 3"
1112-DTT-040100	1-1/2" x 4"
1112-DTT-050100	2" x 4"
1112-DTT-080150	3" x 6"
1112-DTT-100200	4" x 8"

DC TEE UPVC Sch80 x UPVC Sch 80	
CODE	SIZE
1111-DTT-015050	1/2" x 2"
1111-DTT-020080	3/4" x 3"
1111-DTT-025080	1" x 3"
1111-DTT-040100	1-1/2" x 4"
1111-DTT-050100	2" x 4"
1111-DTT-080150	3" x 6"
1111-DTT-100200	4" x 8"
1111-DTT-150250	6" x 10"
1111-DTT-200300	8" x 12"



DC TEE CPVC Sch80 x UPVC Sch 80	
CODE	SIZE
4111-DTT-015050	1/2" x 2"
4111-DTT-020080	3/4" x 3"
4111-DTT-025080	1" x 3"
4111-DTT-040100	1-1/2" x 4"
4111-DTT-050100	2" x 4"
4111-DTT-080150	3" x 6"
4111-DTT-100200	4" x 8"
4111-DTT-150250	6" x 10"
4111-DTT-200300	8" x 12"

DC TEE CPVC Sch80 x CPVC Sch 80	
CODE	SIZE
4141-DTT-015050	1/2" x 2"
4141-DTT-020080	3/4" x 3"
4141-DTT-025080	1" x 3"
4141-DTT-040100	1-1/2" x 4"
4141-DTT-050100	2" x 4"
4141-DTT-080150	3" x 6"
4141-DTT-100200	4" x 8"
4141-DTT-150250	6" x 10"
4141-DTT-200300	8" x 12"

DC TEE CPVC Sch80 x UPVC Sch 80 Clear	
CODE	SIZE
4112-DTT-015050	1/2" x 2"
4112-DTT-020080	3/4" x 3"
4112-DTT-025080	1" x 3"
4112-DTT-040100	1-1/2" x 4"
4112-DTT-050100	2" x 4"
4112-DTT-080150	3" x 6"
4112-DTT-100200	4" x 8"

DC Tee are made from standard pressure fittings by DFP in designated material and schedule selected. Included are separate internal carrier and external containment fittings of the same configuration.

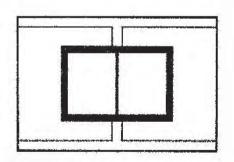
Carrier fittings are equipped with extenders to facilitate cement assembly .



Double Containment Fittings Couplings

DC Couplings UPVC Sch80 x UPVC Sch 40 Clear	
CODE	SIZE
1112-DCL-015050	1/2" x 2"
1112-DCL-020080	3/4" x 3"
1112-DCL-025080	1" x 3"
1112-DCL-040100	1-1/2" x 4"
1112-DCL-050100	2" x 4"
1112-DCL-080150	3" x 6"
1112-DCL-100200	4" x 8"

DC Couplings UPVC Sch80 x UPVC Sch 80	
CODE	SIZE
1111-DCL-015050	1/2" x 2"
1111-DCL-020080	3/4" x 3"
1111-DCL-025080	1" x 3"
1111-DCL-040100	1-1/2" x 4"
1111-DCL-050100	2" x 4"
1111-DCL-080150	3" x 6"
1111-DCL-100200	4" x 8"
1111-DCL-150250	6" x 10"
1111-DCL-200300	8" x 12"



DC Couplings CPVC Sch80 x UPVC Sch 80	
CODE	SIZE
4111-DCL-015050	1/2" x 2"
4111-DCL-020080	3/4" x 3"
4111-DCL-025080	1" x 3"
4111-DCL-040100	1-1/2" x 4"
4111-DCL-050100	2" x 4"
4111-DCL-080150	3" x 6"
4111-DCL-100200	4" x 8"
4111-DCL-150250	6" x 10"
4111-DCL-200300	8" x 12"

DC Couplings CPVC Sch80 x CPVC Sch 80	
CODE	SIZE
4141-DCL-015050	1/2" x 2"
4141-DCL-020080	3/4" x 3"
4141-DCL-025080	1" x 3"
4141-DCL-040100	1-1/2" x 4"
4141-DCL-050100	2" x 4"
4141-DCL-080150	3" x 6"
4141-DCL-100200	4" x 8"
4141-DCL-150250	6" x 10"
4141-DCL-200300	8" x 12"

DC Couplings CPVC Sch80 x UPVC Sch 40 Clear	
CODE	SIZE
4112-DCL-015050	1/2" x 2"
4112-DCL-020080	3/4" x 3"
4112-DCL-025080	1" x 3"
4112-DCL-040100	1-1/2" x 4"
4112-DCL-050100	2" x 4"
4112-DCL-080150	3" x 6"
4112-DCL-100200	4" x 8"

DC Coupling are made from standard pressure fittings by DFP in designated material and schedule selected. Included are separate internal carrier and external containment fittings of the same configuration.

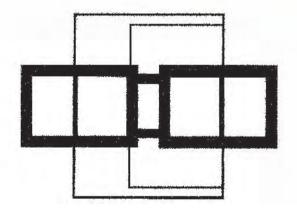
Carrier fittings are equipped with extenders to facilitate cement assembly.



Double Containment Fittings Termination Fittings

DC Termination Fitting UPVC Sch80 x UPVC Sch 80	
CODE	SIZE
1111-DCTM-015050	1/2" x 2"
1111-DCTM-020080	3/4" x 3"
1111-DCTM-025080	1" x 3"
1111-DCTM-040100	1-1/2" x 4"
1111-DCTM-050100	2" x 4"
1111-DCTM-080150	3" x 6"
1111-DCTM-100200	4" x 8"
1111-DCTM-150250	6" x 10"
1111-DCTM-200300	8" x 12"

CODE	CIZE
CODE	SIZE
111-DCTM-015050	1/2" x 2"
111-DCTM-020080	3/4" x 3"
111-DCTM-025080	1" x 3"
111-DCTM-040100	1-1/2" x 4"
111-DCTM-050100	2" x 4"
111-DCTM-080150	3" x 6"
111-DCTM-100200	4" x 8"
111-DCTM-150250	6" x 10"
111-DCTM-200300	8" x 12"



DC Termination Fitting CPVC Sch80 x CPVC Sch 80	
CODE	SIZE
4141-DCTM-015050	1/2" x 2"
4141-DCTM-020080	3/4" x 3"
4141-DCTM-025080	1" x 3"
4141-DCTM-040100	1-1/2" x 4"
4141-DCTM-050100	2" x 4"
4141-DCTM-080150	3" x 6"
4141-DCTM-100200	4" x 8"
4141-DCTM-150250	6" x 10"
4141-DCTM-200300	8" x 12"

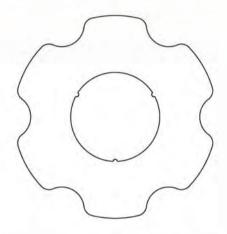
DC Termination Fittings are a special configuration for starting or stopping the containment portion of a system. Termination Fittings consist of a reducer coupling to accept the Containment pipe that is pre-fabricated to an internal extender coupling for connection to exiting Carrier system.



Double Containment Fittings Centralizers

DC Centralizer (Carrier * Containment) Sch80 O.D. * UPVC Sch80							
CODE	SIZE						
11-DCCT-015050	1/2" x 2"						
11-DCCT-050050	3/4" x 2"						
11-DCCT-025080	1" x 3"						
11-DCCT-040100	1-1/2" x 4"						
11-DCCT-050100	2" x 4"						
11-DCCT-080150	3" x 6"						
11-DCCT-100200	4" x 8"						
11-DCCT-150250	6" x 10"						
11-DCCT-200300	8" x 12"						

DC Centralizer (Carrier Containment) Sch80 O.D. * CPVC Sch80							
CODE	SIZE						
41-DCCT-015050	1/2" x 2"						
41-DCCT-050080	3/4" x 3"						
41-DCCT-025080	1" x 3"						
41-DCCT-040100	1-1/2" x 4"						
41-DCCT-050100	2" x 4"						
41-DCCT-080150	3" x 6"						
41-DCCT-100200	4" x 8"						
41-DCCT-150250	6" x 10"						
41-DCCT-200300	8" x 12"						



DC Centralizer (Carrier * Containment) Sch80 O.D. * Sch40 Clear or ECO Clear							
CODE	SIZE						
12-DCCT-015050	1/2" x 2"						
12-DCCT-050050	3/4" x 2"						
12-DCCT-025080	1" x 3"						
12-DCCT-040100	1-1/2" x 4"						
12-DCCT-050100	2" x 4"						
12-DCCT-080150	3" x 6"						
12-DCCT-100200	4" x 8"						
12-DCCT-150250	6" x 10"						
12-DCCT-200300	8" x 12"						

RECOMMENDED MINIMUM CENTRALIZER SUPPORT SPACEING (ft.)*

Carrier Size(in.)	PVC SCHEDULE 40 CARRIER) Temperature ° F					PV	PVC SCHEDULE 40 CARRIER Temperature * F				PVC SCHEDULE 40 CARRIER Temperature * F					
	60°	80°	100°	120"	140°	60°	80°	100°	120°	140°	73°	100°	120°	140°	1600	180•
1/2	4-1/2	4-1/2	4	2-1/2	2-1/2	5	4-1/2	4-1/2	3	2-1/2	5-1/2	5	4-1/2	4-1/2	3	2-1/2
3/4	5	4-1/2	4	2-1/2	2-1/2	5-1/2	5	4-1/2	3	2-1/2	5-1/2	5-1/2	5	4-1/2	3	2-1/2
1	5-1/2	5	4-1/2	3	2-1/2	6	5-1/2	5	3-1/2	3	6	6	5-1/2	5	3-1/2	2
1-1/2	6	5-1/2	5	3-1/2	3	6-1/2	6	5-1/2	3-1/2	3-1/2	7	6-1/2	6	5-1/2	3-1/2	3-1/2
2	6	5-1/2	5	3-1/2	3	7	6-1/2	6	4	3-1/2	7	7	6-1/2	6	4	3-1/2
3	7	7	6	4	3-1/2	8	7-1/2	7	4-1/2	4	8	8	7-1/2	7	4-1/2	4
4	7-1/2	7	6-1/2	4-1/2	4	9	8-1/2	7-1/2	5	4-1/2	9	8-1/2	8	7-1/2	5	4-1/2
6	8-1/2	8	7-1/2	5	4-1/2	10	9-1/2	9	6	5	10	9-1/2	9	8	5-1/2	5
8	9	8-1/2	8	5	4-1/2	11	10-1/2	9-1/2	6-1/2	5-1/2	11	10-1/2	10	9	6	5-1/2
10	10	9	8-1/2	5-1/2	5	12	11	10	7	6	11-1/2	11	9-/12	9-1/2	6-1/2	6
12	11-1/2	10-1/2	9-1/2	6-1/2	5-1/2	13	12	10-12	7-1/2	6-1/2	12-1/2	12	10-1/2	10-1/2	7-1/2	6-1/2

NOTE: Specified minimum spacing can also be used for systme support according to the secondary containment pie size and scheduel used. Where practical, system support should correspond to internal carrier support (centralizers) to minimize concentrated point loads.



Double Containment Pipes UPVC Clear PIPE

UPVC CLEAR SCH.40 PIPE

Nominal			Sched	lule 40	
Pipe Size Size(in.)	O.D.	Average I.D.	Minimum Wall	Nominal Weight Lbs./ft	code
1/2	0.840	0.608	0.109	0.161	12-PI0-0A-0015
3/4	1.050	0.810	0.113	0.214	12-PI0-0A-0020
1	1.315	1.033	0.133	0.315	12-PI0-0A-0025
1-1/4	1.660	1.364	0.140	0.426	12-PI0-0A-0032
1-1/2	1.900	1.592	0.145	0.509	12-PI0-0A-0040
2	2.375	2.049	0.154	0.682	12-PI0-0A-0050
2-1/2	2.875	2.445	0.203	1.076	12-PI0-0A-0065
3	3.500	3.042	0.216	1.409	12-PI0-0A-0080
4	4.500	3.998	0.237	2.006	12-PI0-0A-0100
6	6.625	6.031	0.280	3.535	12-PI0-0A-0150
8	8.625	7.943	0.322	5.305	12-PI0-0A-0200
10	10.750	9.975	0.365	7.966	12-PI0-0A-0250
12	12.750	11.869	0.406	10.534	12-PI0-0A-0300

UPVC ECO CLEAR PIPE

		DIMENSION							
INCH	C)D	Thick	ness	code				
		tolerance	min.	tolerance					
1/2"	0.840	±0.004	0.0826	+0.0197	12-PI0-0A-0015				
3/4"	1.050	±0.004	0.0826	+0.0197	12-PI0-0A-0020				
1"	1.315	±0.005	0.0980	+0.0197	12-PI0-0A-0025				
1-1/4"	1.660	±0.005	0.1102	+0.0197	12-PI0-0A-0032				
1-1/2"	1.900	±0.006	0.1181	+0.0197	12-PI0-0A-0040				
2"	2.375	±0.006	0.1378	+0.0197	12-PI0-0A-0050				
2-1/2"	2.875	±0.007	0.1654	+0.0236	12-PI0-0A-0065				
3"	3.500	±0.008	0.1850	+0.0236	12-PI0-0A-0080				
4"	4.500	±0.009	0.1969	+0.0276	12-PI0-0A-0100				
6"	6.625	±0.110	0.2283	+0.0394	12-PI0-0A-0150				
8"	8.625	±0.015	0.2677	+0.0394	12-PI0-0A-0200				
10"	10.750	±0.015	0.3150	+0.0591	12-PI0-0A-0250				
12"	12.750	±0.015	0.3150	+0.0591	12-PI0-0A-0300				

* NOT CONFORM TO ASTM STANDARD



Double Containment Pipes UPVC schedule 80 pipe

Scope :This specification covers requirements for schedule 80 UPVC pressure pipe as described in ASTM D-1785.

Material: UPVC used is Type I, Grade I

compound, cell classification 12454-B per ASTM

D-1784.

Dimensions: Dimensions and tolerances shall be as shown in the following tables when measured

according to Method D-2122. Tolerances for outof-roundness shall apply only to pipe prior to shipment.

Marking: Indicates manufacturer's name, material designation code, nominal pipe size, schedule size with pressure rating in PSI for water at 73°F, ASTM designation number D-1785.

Schedule 80 Dimensions

單位(unit):inch

Nom Pipe Size(in).		Average I.D.	Min. Wall	Nom. Wt./Ft.	Max W.P. PSI	code	
1/8	0.405	0.195	0.095	0.063	1230	11-PIO-08-0003	
1/4	0.540	0.282	0.119	0.105	1130	11-PIO-08-0008	
3/8	0.675	0.403	0.126	0.146	920	11-PIO-08-0010	
1/2	0.840	0.526	0.147	0,213	850	11-PIO-08-0015	
3/4	1.050	0.722	0.154	0,289	690	11-PIO-08-0020	
1	1.315	0.936	0.179	0.424	630	11-PIO-08-0025	
1-1/4	1.660	1,255	0.191	0,586	520	11-PIO-08-0032	
1-1/2	1.900	1.476	0.200	0.711	470	11-PIO-08-0040	
2	2.375	1.913	0.218	0.984	400	11-PIO-08-0050	
2-1/2	2.875	2.290	0.276	1,500	420	11-PIO-08-0065	
3	3,500	2.864	0.300	2.010	370	11-PIO-08-0080	
4	4.500	3,786	0.337	2,983	320	11-PIO-08-0100	
5	5.563	4.768	0.375	4.078	290	11-PIO-08-0125	
6	6.625	5.709	0.432	5.610	280	11-PIO-08-0150	
8	8.625	7.565	0.500	8.522	250	11-PIO-08-0200	
10	10.750	9.493	0.593	12.635	230	11-PIO-08-0250	
12	12,750	11.294	0.687	17.384	230	11-PIO-08-0300	
14	14,000	12.410	0.750	20.852	220	11-PIO-08-0350	
16	16.000	14.231	0.843	26.810	220	11-PIO-08-0400	
18	18.000	16.014	0.937	33.544	220	11-PIO-08-0450	
20	20,000	17.814	1.031	41.047	220	11-P(O-08-0500	
24	24,000	21.418	1.218	58.233	210	11-PIO-08-0600	



Double Containment Pipes CPVC schedule 80 pipe

Scope: This specification covers requirements for schedule 80 CPVC pressure pipe as described in ASTM F-441.

Material: CPVC used is Type IV, Grade I compound, cell classification 23447-B per ASTM D-1784.

Dimensions: Dimensions and tolerances shall be as shown in the following tables when measured

according to Method D-2122. Tolerances for outof-roundness shall apply only to pipe prior to shipment.

Marking: Indicates manufacturer's name, material designation code, nominal pipe size, schedule size with pressure rating in PSI for water at 73°F, ASTM designation number F-441.

Schedule 80 Dimensions

單位(unit):inch

Nom Pipe Size(in).	O.D.	Average I.D.	Min. Wall	Nom. Wt/Ft	Max W.P. PSI	code
1/4	0.540	0.282	0.119	0.117	1130	41-PIO-08-0008
3/8	0.675	0.403	0.126	0.162	920	41-PIO-08-0010
1/2	0.840	0.526	0.147	0.238	850	41-PIO-08-0015
3/4	1.050	0.722	0.154	0.322	690	41-PIO-08-0020
1	1.315	0.936	0.179	0.473	630	41-PIO-08-0025
1-1/4	1.660	1.255	0.191	0.654	520	41-PIO-08-0032
1-1/2	1.900	1.476	0.200	0.793	470	41-PIO-08-0040
2	2.375	1.913	0.218	1.097	400	41-PIO-08-0050
2-1/2	2.875	2.290	0.276	1.674	420	41-PIO-08-006
3	3.500	2.864	0.300	2.242	370	41-PIO-08-0080
4	4.500	3.786	0.337	3.277	320	41-PIO-08-0100
5	5.563	4.768	0.375	4.078	290	41-PIO-08-012
6	6.625	5.709	0.432	6.258	280	41-PIO-08-0150
8	8.625	7.565	0.500	9.506	250	41-PIO-08-0200
10	10.750	9.493	0.593	14.095	230	41-PIO-08-0250
12	12.750	11,294	0.687	19.392	230	41-PIO-08-0300
14	14.000	12.410	0.750	23.261	220	41-PIO-08-0350
16	16.000	14.213	0.843	29.891	220	41-PIO-08-0400
18	18.000	16.014	0.937	35,419	220	41-PIO-08-0450
20	20.000	17.814	1,031	45.879	220	41-PIO-08-0500
24	24.000	21.418	1.281	64.959	210	41-PIO-08-0600