

Radiant Onix™

Onix Radiant Tubing Onix Clamps Onix Fittings



Watts Radiant
Floor Heating & Snowmelting

A subsidiary of Watts Water Technologies, Inc.



Onix™ Radiant Tubing

Standard Onix Coils — the best tubing for underfloor radiant, cold weather installations, and snowmelt.

DESCRIPTION	MODEL NUMBER	ORDER NUMBER	WT (LBS.)
3/8" ONIX			
3/8" Onix x 120' Coil	086061-120	81001556	22
3/8" Onix x 140' Coil	086061-140	81001557	25
3/8" Onix x 160' Coil	086061-160	81001558	29
3/8" Onix x 180' Coil	086061-180	81001559	32
3/8" Onix x 200' Coil	086061-200	81001560	36
3/8" Onix x 600' Spool	086061-600	81001565	108
1/2" ONIX			
1/2" Onix x 200' Coil	086081-200	81001579	46
1/2" Onix x 250' Coil	086081-250	81001582	58
1/2" Onix x 300' Coil	086081-300	81001584	69
1/2" Onix x 400' Spool	086081-400	81001587	92
1/2" Onix x 600' Spool	086081-600	81001590	138
5/8" ONIX			
5/8" Onix x 50' Coil	086101-50	81001612	13
5/8" Onix x 100' Coil	086101-100	81001600	25
5/8" Onix x 200' Coil	086101-200	81001603	50
5/8" Onix x 300' Spool	086101-300	81001605	75
5/8" Onix x 400' Spool	086101-400	81001609	100
5/8" Onix x 600' Spool	086101-600	81001616	150
3/4" ONIX			
3/4" Onix x 50' Coil	086121-50	81001635	18
3/4" Onix x 100' Coil	086121-100	81001627	35
3/4" Onix x 200' Coil	086121-200	81001629	70
3/4" Onix x 300' Spool	086121-300	81001631	105
3/4" Onix x 400' Spool	086121-400	81001634	140
1" ONIX			
1" Onix x 50' Coil	086161X-50	81001647	28
1" Onix x 100' Spool	086161X-100	81001642	55
1" Onix x 200' Spool	086161X-200	81001644	110

Onix with AlumaShield oxygen barrier weathers the extremes of any radiant heating or snowmelting application. Onix's EPDM inner tube offers very high temperature resistance, while the Aramid reinforcing handles higher burst pressures. The **EPDM** cover offers abrasion, UV, and chemical resistance. Onix is sold by the coil. Use it for radiant heating, snowmelting, or supply piping to baseboard or hydro-air units. Onix is fast, easy to install, and unlike PEX, it doesn't expand and contract in underfloor installations.

Onix can be special ordered in other lengths; round 3/8" Onix to the nearest 20' length desired, and all other sizes to the nearest 25'. Onix is tested to relevant portions of several ASTM standards and carries the UPC mark as approved by the International Association of Plumbing and Mechanical Officials (IAPMO). It carries a 25 year limited warranty for radiant and hydronic applications.

SOLAR LISTING COMING: Onix has been successfully tested to SRCC 100-05 and will soon carry the USEC mark (Uniform Solar Energy Code), as approved by IAPMO. This certification allows Onix to be used for supply and return piping to solar-thermal panels and in a variety of other green applications; please see www.wattsradiant.com for installation guidelines and the Onix Solar warranty.



See ICC-ES Legacy Report No. 95-47

Onix™ Radiant Tubing

Spliced Onix — short lengths joined with crimped industrial brass ferrule fittings.

DESCRIPTION	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" SPLICED ONIX			
3/8" Onix x 160' Coil	087061-160	81001653	29
3/8" Onix x 180' Coil	087061-180	81001654	32
3/8" Onix x 200' Coil	087061-200	81001655	36

Other lengths are available upon request.

Spliced Onix is made of the same materials as standard Onix and is available at a 10% discount off the standard Onix price. Splice assemblies are made with brass barbed splices and crimped ferrules protected with heavy-weight shrink tubing. Lengths of 200' or less are constructed with just one factory splice. Lengths of 200' or more are constructed using lengths that average 100' long between connections. As an example, a 600' length of 3/8" spliced Onix may have up to 5 splices.



The Word from the Field about Onix . . .



Onix Staple Up™ is the fastest, quietest, least expensive, and most hassle free way to install radiant floor heating. Onix conducts heat through the flooring to warm your room quietly and evenly without changing your finished floor height. No need to install aluminum plates with this application. They're simply not needed.

Unlike PEX tubing, which becomes more rigid and harder to install in cold weather, Watts Radiant's Onix retains its superb flexibility and is great for projects like snowmelting this access ramp. It's the absolute best choice for cold weather installation, especially for tricky installations like stairways.



Onix Fittings



SelfTite™ Clamps — Pre-tensioned for easy field installation. The chrome-vanadium spring steel maintains a constant tension on the Onix under all operating conditions. SelfTites incorporate a zinc coating to guard against corrosion. If you choose SelfTites, we strongly suggest you use our SqueezeTite™ Pliers. This tool grabs the SelfTite clamp tightly, and holds it firmly while you slide the clamp into place. Unlike ordinary pliers, it also protects the SelfTite clamp against being “sprung” and bent out of shape.

DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" SelfTite Clamp (19 mm)	10	663019-10	81000523	3
3/8" SelfTite Clamp (19 mm)	50	663019-50	81000524	8
1/2" SelfTite Clamp (22 mm)	10	663022-10	81000526	4
1/2" SelfTite Clamp (22 mm)	50	663022-50	81000527	10
5/8" SelfTite Clamp (25 mm)	10	663025-10	81000529	4
5/8" SelfTite Clamp (25 mm)	50	663025-50	81000530	10
3/4" SelfTite Clamp (29 mm)	10	663029-10	81000532	5
3/4" SelfTite Clamp (29 mm)	50	663029-50	81000533	11



SqueezeTite™ Pliers
Order No. 81000600

Use the SqueezeTite Pliers to install SelfTite clamps (see Fasteners and Tools for ordering information). Warning: **It is important that you always match the correct SelfTite Clamp with the correct Onix size. The size of each clamp is marked in millimeters on the clamp's tab. If you use the wrong size clamp, such as a 5/8" clamp on 1/2" Onix, the connection will leak. Follow the instructions provided in each package.**

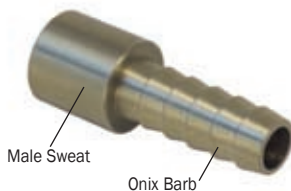
TorqueTite™ Clamps — our best stainless steel screw clamps.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" TorqueTite Clamp (17–19 mm)	10	6641117-10	81002913	2
3/8" TorqueTite Clamp (17–19 mm)	50	6641117-50	81002914	6
1/2" TorqueTite Clamp (21–23 mm)	10	6641524-10	81002916	2
5/8" TorqueTite Clamp (25–27 mm)	10	6641928-10	81002919	2
3/4" TorqueTite Clamp (29–31 mm)	10	6642232-10	81002922	2
1" TorqueTite Clamp (37–40 mm)	10	6643244-10	81002925	3

The Onix **TorqueTite** is a rugged, stainless steel clamp capable of withstanding large pressures and temperatures while being easy to install. Do not overtighten! Carefully follow all instructions.

Onix Barb x Sweat Fittings — for transitioning Onix to sweat fittings.



Male Sweat

Onix Barb

DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" Onix x 1/2" Fitting Barb	10	684001-10	81000659	1
3/8" Onix x 1/2" Fitting Barb	50	684001-50	81000660	4
1/2" Onix x 1/2" Fitting Barb	10	685001-10	81000663	1
1/2" Onix x 1/2" Fitting Barb	50	685001-50	81000664	4
5/8" Onix x 1/2" Fitting Barb	10	686001-10	81000667	1
5/8" Onix x 1/2" Fitting Barb	50	686001-50	81000668	4
3/4" Onix x 3/4" Fitting Barb	10	687001-10	81000671	2
3/4" Onix x 3/4" Fitting Barb	50	687001-50	81000672	9
1" Onix x 1" Fitting Barb	10	688001-10	81000675	4

Sweat **Onix Barbs** into copper tees or ball valves for easy field manifold construction.

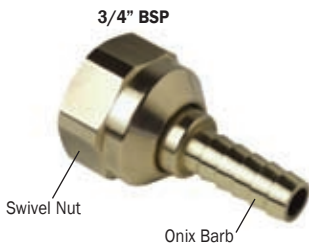
Onix Fittings

Onix Barb x MNPT Fittings — for transitioning Onix to female NPT fittings.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" Barb x 1/2" MPT	10	180806-10	81005046	1
1/2" Barb x 1/2" MPT	10	180808-10	81005047	1
5/8" Barb x 1/2" MPT	10	180810-10	81005048	1
3/4" Barb x 3/4" MPT	10	181212-10	81005051	2
1" Barb x 1" MPT	10	181214-10	81005053	4

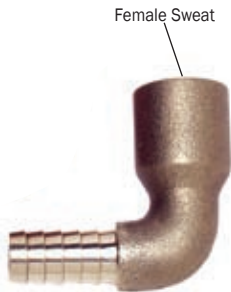
Onix Female BSP Swivel Fittings — for *Stainless Steel, CazzBrass, and Custom Tubular* Manifolds.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" Onix x 3/4" BSP Swivel Fitting	10	689001-10	81000679	1
1/2" Onix x 3/4" BSP Swivel Fitting	10	689002-10	81000681	1
5/8" Onix x 3/4" BSP Swivel Fitting	10	689003-10	81000683	2
3/4" Onix x 3/4" BSP Swivel Fitting	10	689004-10	81000684	2

Use these female **Onix T20 Fittings** to connect Onix to our Stainless Steel, CazzBrass, and Custom Tubular compression manifolds. Order Onix SelfTite or TorqueTite clamps separately, one clamp for each fitting.

Onix Female Sweat (copper fitting) Elbow Fittings — for connecting Onix supply lines to baseboard or fan coils.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
1/2" Onix x 3/4" Female Sweat	10	185074-10	81000116	3
5/8" Onix x 3/4" Female Sweat	10	185625-10	81000120	3
3/4" Onix x 3/4" Female Sweat	10	185075-10	81000118	3

Use these all brass **Onix Elbow Fittings** to make transitions to baseboards, radiators, or fan coils when using Onix as supply/return piping. Onix elbows make a neat, professional connection. Onix's flexibility makes it the preferred product for fast, easy connections, especially in retrofit applications. Plus, Onix doesn't expand and contract, so it is absolutely silent.

SelfTite™ Onix Repair Kits — preassembled kits for field repairs. Each repair kit includes two splices and four SelfTite clamps.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" SelfTite Onix Repair Kit	1 kit	660075	81000507	1
1/2" SelfTite Onix Repair Kit	1 kit	660085	81000509	1
5/8" SelfTite Onix Repair Kit	1 kit	660105	81000511	2
3/4" SelfTite Onix Repair Kit	1 kit	660125	81000513	2

Each **SelfTite Repair Kit** contains two double-ended barbs, four clamps, and instructions to help insure that the repair is done properly. Be sure to pressure test the repair after work is performed.



Onix Fittings

TorqueTite™ Onix Repair Kits — pre-assembled kit for field repairs. Each repair kit includes two splices and four TorqueTite clamps.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" TorqueTite Repair Kit	1 kit	660076	81000508	1
1/2" TorqueTite Repair Kit	1 kit	660086	81000510	1
5/8" TorqueTite Repair Kit	1 kit	660106	81000512	2
3/4" TorqueTite Repair Kit	1 kit	660126	81000514	2
1" TorqueTite Repair Kit	1 kit	660166	81000515	4

Each **TorqueTite Repair Kit** contains two double-ended barbs, four clamps, and instructions to help insure that the repair is done properly. Be sure to pressure test the repair after work is performed.

Onix Couplings — for making field repairs.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" Onix Coupling	10	677062-10	81000611	1
1/2" Onix Coupling	10	677082-10	81000615	1
5/8" Onix Coupling	10	677101-10	81000618	1
3/4" Onix Coupling	10	677121-10	81000621	1
1" Onix Coupling	10	677122-10	81000623	2

Use **Onix Couplings** to make field repairs and connections when necessary. Be sure to use Watts Radiant's TorqueTite or SelfTite clamps when making all field splice repairs and closely follow all guidelines. Order clamps separately.



3/4" Male BSP x Male Sweat Fittings — use with Onix BSP swivel fittings.

DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/4" Male BSP x 1/2" Male Sweat Fitting	10	PX690500-10	81001507	1
3/4" Male BSP x 3/4" Male Sweat Fitting	10	PX690750-10	81001510	1

These fittings are manufactured for use with Onix BSP swivel fittings (threaded female), and are offered in two sizes to fit 1/2" or 3/4" copper fittings. Contractor discretion determines whether 1/2" or 3/4" sweat is more desirable.

In-Line Mini Ball Valves — for balancing and system service in a retrofit situation.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
In-Line Mini Ball Valve with 3/8" Barbs	1	850020	81000748	3
In-Line Mini Ball Valve with 1/2" Barbs	1	850022	81000750	3
In-Line Mini Ball Valve with 5/8" Barbs	1	850023	81000751	3

3/8" Onix x 1/2" Ftg. MBV

In-Line Mini Ball Valves are designed to be spliced directly into an Onix circuit. Only use these for retrofit situations, and make sure you support the Onix to prevent a kink on either side of the valve.

Mini Ball and Balancing Valves — for circuit isolation and balancing on field-built manifolds.



DESCRIPTION	QTY.	MODEL NUMBER	ORDER NUMBER	WT. (LBS.)
3/8" Onix x 1/2" Ftg. MBV (0.44" bore)	1	446105	81000366	3
3/8" Onix x 1/2" Ftg. MBV-BAL (0.44" bore)	1	445425	81005415	4

Use **Mini Ball Valves** to isolate and/or regulate the flow of individual tubing circuits. For more exact flow balancing, use **Mini Balancing Valves**, where balancing is accomplished by rotating the threaded spindle below the brass safety cap. Each turn represents approximately 10% of full flow. Approximate Cv is 3.0. (These ball valves are not available in other sizes.)

3/8" Onix x 1/2" Ftg. MBV-BAL