

Food Grade Solutions LLC

Spanware™

Sanitary IMP-Anchors

For sanitary attachment of conduit, pipe and components to insulated metal panels



Food Grade Solutions LLC now offers Spanware™ IMP-Anchor assemblies. They are our newest addition to the Food Grade Strut® line of sanitary conduit and pipe mounting systems. Our Spanware™ IMP-Anchor system is designed specifically for attaching Food Grade Strut® and other industrial components to insulated metal panels that are commonly used as walls and ceilings for modern food processing facilities. We have application specific anchors for both shear and tension applications.

Food Grade Solutions LLC 559-834-1219 www.foodgradesolutions.com PO Box 69 Fowler, CA 93625
Food Grade Strut® is a registered trademark of Food Grade Solutions LLC, Fowler, Ca 93625
FGS systems are Patent Protected 7651056, 7926760, 7931242 and other patents pending.

Insulated metal panels consist of a polystyrene/polyurethane core that is sandwiched between laminations of epoxy coated, galvanized steel. While IMP panel is a rigid, well insulated, cost-effective construction material, the fact that it is primarily comprised of polystyrene/polyurethane foam makes the attachment of conduit, pipe and industrial components to its surface a challenge. The solution for this challenge is to use Spanware™ IMP-Anchor assemblies to attach components to insulated metal panels.



Our Spanware™ IMP-Anchor system includes several options:



IMP-AD-375:

Insulated Metal Panel Anchor for shear load use in wall thicknesses of 4", 5" & 6". This anchor is constructed of food grade Delrin and sealed against wall with food grade EPDM. It features 3/8" 304 stainless steel mounting hardware. See load charts for safe working loads.



IMP-AD-250:

Insulated Metal Panel Anchor for shear load use in wall thicknesses of 4", 5" & 6". This anchor is constructed of food grade Delrin and sealed against wall with food grade EPDM. It features 1/4" 304 stainless steel mounting hardware. See load charts for safe working loads.



IMP-AD-210:

Insulated Metal Panel Anchor for shear load use in wall thicknesses of 4", 5" & 6". This anchor is constructed of food grade Delrin and sealed against wall with food grade EPDM. It features 10-24 304 stainless steel mounting hardware. See load charts for safe working loads.



IMP-AS-375:

Insulated Metal Panel Anchor for shear load use in wall thicknesses of 4", 5" & 6". This anchor is constructed of food grade Delrin and sealed against wall with food grade EPDM. It features 3/8" 304 stainless steel mounting hardware and a stainless steel wall spacer. See load charts for safe working loads.



IMP-AD-375-S:

Stubby Insulated Metal Panel Anchor for shear load use in wall thicknesses of 2", 2-1/2" & 3". This anchor is constructed of food grade Delrin and sealed against wall with food grade EPDM. It features 3/8" 304 stainless steel mounting hardware. See load charts for safe working loads.



IMP-AD-250-S:

Stubby Insulated Metal Panel Anchor for shear load use in wall thicknesses of 2", 2-1/2" & 3". This anchor is constructed of food grade Delrin and sealed against wall with food grade EPDM. It features 1/4" 304 stainless steel mounting hardware. See load charts for safe working loads.



IMP-AD-210-S:

Stubby Insulated Metal Panel Anchor for shear load use in wall thicknesses of 2", 2-1/2" & 3". This anchor is constructed of food grade Delrin and sealed against wall with food grade EPDM. It features 10-24 304 stainless steel mounting hardware. See load charts for safe working loads.



IMP-HDT-375:

Heavy Duty Insulated Metal Panel Anchor for Tension load use in ceiling and wall thicknesses of 2" – 6" (specify your wall/ceiling thickness when ordering). This anchor is constructed of food grade Delrin and sealed against both sides of wall/ceiling with food grade EPDM. It features 3/8" 304 stainless steel mounting hardware. This anchor, like all Spanware™ IMP Anchors, is designed for blind installation that does not require access to the opposite side of wall/ceiling.



IMP-SP-375:

Spanner Plug is designed for sealing old work penetrations in IMP Walls. This plug is constructed of food grade Delrin and sealed against wall with food grade EPDM. This plug's minimum diameter, low profile, and vertically aligned spanner grooves discretely seals abandoned anchor holes that are no longer required.



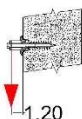
Accessories: IMP-ATC-375 & IMP-DB-12

Food Grade Solutions LLC offers accessories to compliment our line of Spanware™ IMP Anchors, including:

IMP-ATC-375: Anchor installation tool kit includes 1-1/8" hole saw with Delrin drill stop, 3/8"NC gun tap, and 9/16" hex driver with torque limiting clutch calibrated for 4 ft-lbs. This kit increases productivity, protects IMP wall from over depth drilling, and insures proper tightening of Spanware™ IMP Anchors.

IMP-DB-12: "Dog Bone" moment member is used when installing vertical pipes on horizontal Food Grade Strut®. In applications where live load exceeds the cantilevered ratings (application #2 in load chart), utilizing IMP-DB-12 moment member permits increased loads (application #3 in load chart with vertical center distance of 12").

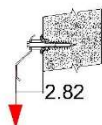
Safe working loads for wall mount (shear) applications are as follows:



Application #1: Cantilevered stud

Restraint factor approaching zero.
 Static Loading @1g
 Allowable downward shear force parallel to wall and within 1.20" of wall plane

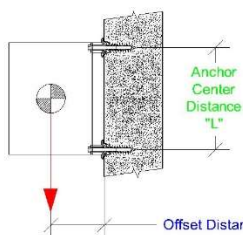
IMP-AS-375, IMP-AD-375, IMP-AD-250, and IMP-AD-210 are rated for 35#
 IMP-AD-375-S, IMP-AD-250-S, and IMP-AD-210-S are rated for 17#



Application #2: Cantilevered stud with Food Grade Strut

Restraint factor approaching zero.
 Static Loading @1g
 Downward shear force parallel to wall and within 2.82" of wall plane

IMP-AS-375, IMP-AD-375, IMP-AD-250, and IMP-AD-210 are rated for 25#
 IMP-AD-375-S, IMP-AD-250-S, and IMP-AD-210-S are rated for 12#



Application #3: Pair of Studs Coupled Vertically

Restraint factor approaching one.
 Static Loading @1g
 Use charts below:

SWL (Safe Working Load Chart) in Lbs. for:
 IMP-AD-375-S, IMP-AD-250-S, IMP-AD-210-S

		Offset distance from wall "D"			
		3"	4"	5"	6"
Anchor center distance "L"	6"	20	15	12	7
	9"	25	22	20	10
	12"	30	25	22	20
	24"+	35	30	27	25

SWL (Safe Working Load Chart) in Lbs. for:
 IMP-AD-375, IMP-AD-250, IMP-AD-210

		Offset distance from wall "D"			
		3"	4"	5"	6"
Anchor center distance "L"	6"	40	30	25	15
	9"	50	45	40	20
	12"	60	50	45	40
	24"+	70	60	55	50

SWL (Safe Working Load Chart) in Lbs. for:
 IMP-AS-375

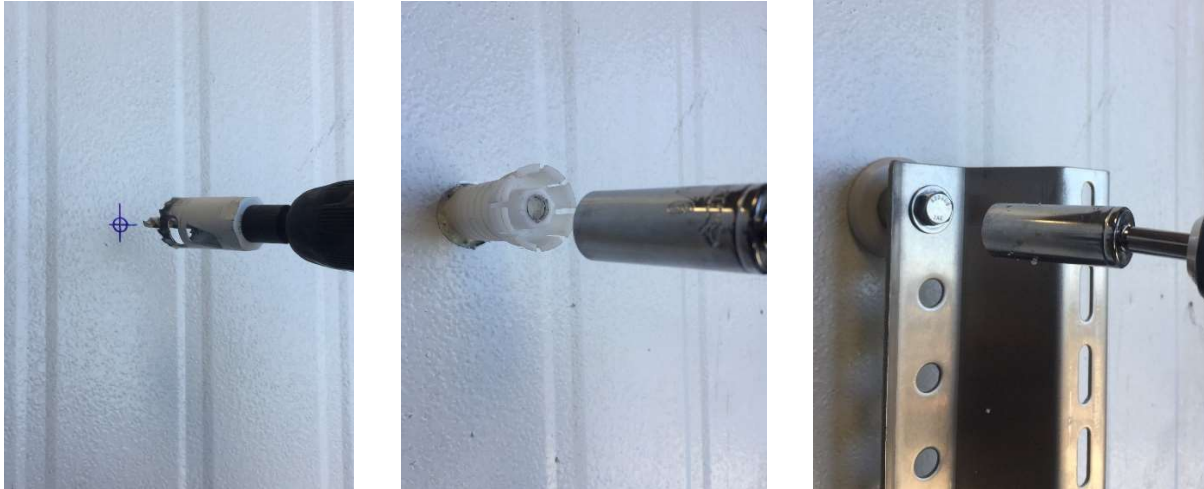
		Offset distance from wall "D"			
		3"	4"	5"	6"
Anchor center distance "L"	6"	40	30	25	15
	9"	55	50	40	20
	12"	65	55	50	40
	24"+	80	70	60	50

SWL (Safe Working Load Chart) in Lbs. for:
 IMP-HDT-375 upper + IMP-AD-375 lower

		Offset distance from wall "D"			
		3"	4"	5"	6"
Anchor center distance "L"	6"	60	45	30	20
	9"	80	55	40	30
	12"	100	80	55	45
	24"+	120	100	80	60

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Spanware™ IMP-Anchors are easily installed with common tools. Their aggressive thread profile and expanding castellated ferrule ensure a snug, watertight attachment to walls made from insulated metal panels, and provide for a sanitary, food grade installation. Installation procedure is as follows:



Installation Procedure:

1. Drill through exterior steel lamination with a 1-1/8" diameter hole saw. Only drill through first steel lamination and do not continue drilling into polystyrene/polyurethane core.
2. Insert threaded screw section and drive into the insulated metal panel until the barbs of the castellated ferrule just "snap past" the steel lamination.
3. Push the 3/8" x 2-1/4" stainless steel cap screw through the stainless steel flat washer, then through the flange of the item to be attached to the wall, then through the wall spacer, the gasketed thrust washer, and then into the threaded screw section.
4. Tighten bolt to 4 ft*lbs. Do not over tighten the assembly. Over tightening the assembly will cause fastener/substrate failure and will compromise the assembly's ability to bear load.

Food Grade Solutions LLC

Warranty and Liability Statement for Spanware™ IMP Anchors

1. Food Grade Solutions LLC warrants the material and craftsmanship of our product for 90 days.
2. Spanware™ IMP Anchors are not UV rated and have a safe operating temperature range of +20 F - +180F
3. Design loads are based on proper installation in new IMP wall fabricated of standard density polyurethane core laminated with galvanized, epoxy coated steel.
4. Improper installation or tightening anchors beyond 4 ft*lbs is not permitted or covered under warranty.
5. Only Spanware™ IMP Anchor model #IMP-HDT-375 is capable of ceiling/tension loads.
6. Safe Working Loads do not take into consideration Seismic, wind or vibrational loads. If Spanware™ IMP Anchors are to be used in these conditions, consult a locally licensed civil engineer to properly de-rate accordingly.
7. Food Grade Solutions LLC's liability is limited to the cost of replacing IMP-Anchor components at our discretion, and only if it is determined that there is a material or craftsmanship flaw. This excludes all other liability including but not limited to, mechanical, chemical, or moisture damage to substrate to which anchor is attached, damage to items being supported, injury to personnel, equipment, damage, product damage, product loss, down time, labor cost, legal cost, and all other liabilities.
8. Consult load rating chart for Spanware™ IMP Anchor for safe working loads.
9. Consult IMP panel manufacturer for allowable anchor frequency/on centers, and total allowable live load added to panel. Food Grade Solution LLP does not warrant the ability of the substrates to which our anchors are attached to bear the live load of our products, or the live loads of the items our products support. It is the responsibility of the specifier, designer, and installer to ensure the IMP Panel to which our products and their associated live loads are attached are rated to bear such loads.
10. Spanware™ IMP Anchors are designed for installation on MetlSpan® IMP panel styles "CF Architectural Smooth" or "CF Light Mesa" with no embossing (or equivalent). Spanware™ IMP Anchors are not recommended for use in heavily corrugated or embossed IMP panels where moisture intrusion into the IMP Panel is a concern.
11. It is the responsibility of the Specifier, Designer and Installer to insure a moisture tight installation of Spanware IMP Anchors to IMP (insulated metal panel) Panels.

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