The intelligent alternative for flue gas venting systems

InnoFlue® is the first polymeric vent system tested and listed to ULC-S636 and UL-1738 in North America.
Intelligent for a good reason

Centrotherm manufactures products designed to save time and money. By putting a specific focus on versatility, Centrotherm products offer a comprehensive solution that is an asset on any jobsite.

Our vents and accessories are engineered to be lightweight and install rapidly. Maximize efficiency by quickly changing between product families and be confident you’ve chosen a safer, easier exhaust and air intake solution.

Centrotherm: Solutions Beyond

Centrotherm solutions beyond

Made in the USA
BlitzFlex® is Centrotherm’s brand new air-intake system. Saving time and money on every installation, BlitzFlex® provides a continuous, one-piece air-intake connection for any heating appliance.

Made from flexible polymer, BlitzFlex® ships in a BlitzPack master carton. BlitzFlex® can be pulled from this master carton as needed at the point of use, eliminating a bulky and unwieldy coil.

A single BlitzPack carton provides enough air-intake conduit to complete 3-5 standard residential systems.

Materials and Construction: BlitzFlex® is constructed of flexible, corrugated polymer in the Centrotherm manufacturing facility in the USA. It should be used in conjunction with InnoFlue® polypropylene vents and accessories.

Diameters: 2” (60mm), 3” (80mm), & 4” (110mm)

Centrotherm BlitzKits are designed to save time and money on every installation.

Cut BlitzFlex® to the desired length, and combine it with a Centrotherm BlitzKit. Air-intake installations have never been faster and easier. BlitzKits, in 2” (60mm), 3” (80mm), & 4” (110mm) diameters, provide all the components necessary to complete most residential air-intake systems.

Materials and Construction: Centrotherm BlitzKits include a 2’ rigid vent length, a 45° elbow, an appliance adaptor, and support clamps. These standard InnoFlue® components create a termination typical of many air-intake configurations. (Note: 2” BlitzKits also come with 2 Flex couplers.)

For a video tutorial on assembly, please visit the Centrotherm website.

Diameters: 2” (60mm), 3” (80mm), & 4” (110mm)
InnoFlue® Vent Systems

Applications:
InnoFlue® Single Wall Residential is for use with ANSI Category II and IV appliances, including tankless and direct vent water heaters, high-efficiency water heaters, condensing boilers and 90+ furnaces. InnoFlue® Single Wall Residential vent systems can be used with natural gas, propane and oil fueled appliances with maximum flue gas temperatures of 230°F / 110°C.

Materials and Construction:
InnoFlue® Single Wall Residential is constructed with flame resistant polypropylene. Gasketed sockets are integrated into each fitting and vent length, eliminating the need for primers, glues and couplers. Gasketed connections allow for rapid installation and adjustability. Industry leading corrosion resistant Peroxide Cross Linked EPDM Gaskets come standard in every vent length.

Diameters:
2” (60mm), 3” (80mm), 4” (110mm) & 5” (125mm)

Applications:
InnoFlue® Single Wall Commercial is a vent system for use with ANSI Category II and IV appliances. Designed to efficiently manage condensates, cascade or common vent multiple high-efficiency water heaters, condensing boilers and 90+ furnaces. InnoFlue® Single Wall Commercial can be used with natural gas, propane and oil fueled appliances with maximum flue gas temperatures of 230°F / 110°C. Contact Centrotherm for accurate capacity sizing and for assistance with system layout and design.

Materials and Construction:
InnoFlue® Single Wall Commercial is constructed with flame resistant polypropylene. Gasketed sockets are integrated into each fitting and vent length, eliminating the need for primers, glues and couplers. Gasketed connections allow for rapid installation and adjustability. Industry leading corrosion resistant Peroxide Cross Linked EPDM Gaskets come standard in every vent length and fitting.

Diameters:
6” (160mm), 8” (200mm), 10” (250mm) & 12” (315mm)
InnoFlue® Flex

**Applications:**
InnoFlue® Flex is for use with ANSI Category II and IV appliances, including tankless and direct vent water heaters, high-efficiency water heaters, condensing boilers and 90+ furnaces. InnoFlue® Flex vent systems can be used with natural gas, propane and oil fueled appliances with maximum flue gas temperatures of 230°F / 110°C. InnoFlue® Flex is designed for use in a vertical orientation inside a chase. Acceptable chase construction includes masonry chimney, B-Vent and gypsum. InnoFlue® Flex is engineered to navigate offsets up to 45 degrees. Multiple offsets and multiple liners can be supported within a single chase.

**Materials and Construction:**
InnoFlue® Flex is constructed of flexible corrugated flame resistant polypropylene. 2” diameter Flex uses snap fit couplers to transition from InnoFlue® Single Wall Residential at the base of a chase. 3” and 4” diameters have integrated InnoFlue® Single Wall sections spaced every 2 to 3 feet allowing the InnoFlue® Flex to plug directly into an InnoFlue® Base Support.

**Diameters:**
2” (60mm), 3” (80mm), & 4” (110mm)

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InnoFlue® Concentric

**Applications:**
InnoFlue® Concentric is a highly engineered vent system allowing for the movement of combustion air and combustion exhaust through a single vent system. InnoFlue® Concentric is engineered for use with ANSI Category II and IV appliances, including tankless and direct vent water heaters, high-efficiency water heaters, condensing boilers and 90+ furnaces. InnoFlue® Concentric vent systems can be used with natural gas, propane and oil fueled appliances with maximum flue gas temperatures of 230°F / 110°C. The vent system can be integrated with InnoFlue® Single Wall and Flex where applicable.

**Materials and Construction:**
InnoFlue® Concentric inner is constructed of Centrotherm’s industry leading flame resistant polypropylene. InnoFlue® Concentric outer is constructed of best in class laser welded metal outers with cast fittings. All metal components receive our proprietary self sealing coating resulting in a durable finish that provides best in class quality and aesthetics.

**Diameters:**
2 1/4” (60/100mm), 3 1/5” (80/125mm), 4 1/8” (110/160mm)
InnoFlue®
Single Wall Residential

Made of Polypropylene:
- Higher operating temperature than CPVC
- 100% recyclable LEED compliant material
- Superior performance in cold weather conditions
- Zero clearance to combustibles reduces foot print
- Improved resistance to caustic condensates making it suitable for gas, propane and oil fired appliances
- No leaching of appliance-damaging chlorides
- Environmentally friendly manufacturing processes

Quality Workmanship:
- Tighter male to female relationship for consistently tight fit up to 5000 pa pressure rating
- Smoother inner wall for better draft characteristics
- Tested and listed to UL-1738 and ULC-S636 by Intertek for sustained flue gases up to 230°F (110°C)
- Comprehensive list of approved appliance manufacturers
- Warranty - InnoFlue® comes with an unprecedented 10 year limited manufacturer’s warranty

Engineered for Flue Gas Venting:
- EPDM gaskets have superior resistance to condensates
- Long sockets for great system stability and 1/4"/ft pitch
- Eliminates V.O.C. containing primers & glues
- Immediate use of heating system upon installation
- Faster installation
- System adjustability
- Tighter seal rated at 20” water column
- Industry leading 10’ effective vent lengths
- No Glues, primers, or solvents ever
- Light weight eliminating installation fatigue
- Easier to cut and handle

Patented Snap-on Connector Ring:
- Rapid installation
- Allows for post installation adjustability
- Patented design reduces complexity and cost

Direct Vent Systems:
The most common method of venting, Direct Vent Systems utilize fresh air drawn from outside of the structure to support combustion. Single Wall Direct Vent Systems can exit through the roof or a wall and are available with numerous termination options.

Terminations

<table>
<thead>
<tr>
<th>Low Profile Termination</th>
<th>Concentric Wall Termination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sidewall/Roof Twin Pipe with UV Stabilizing Fittings</td>
<td>Concentric Roof Termination</td>
</tr>
<tr>
<td>Universal B-Vent Cap</td>
<td>Chimney Covers, PPs-UV Black &amp; Stainless Steel</td>
</tr>
</tbody>
</table>

Solution:
InnoFlue®
Single Wall Commercial

Made of Polypropylene:
- Higher operating temperature than PVC & CPVC
- 100% recyclable LEED compliant material
- Superior performance in cold weather conditions
- Zero clearance to combustibles reduces foot print
- Improved resistance to caustic condensates making it suitable for gas, propane and oil fired appliances
- No leaching of appliance-damaging chlorides
- Environmentally friendly manufacturing processes

Quality Workmanship:
- Tighter male to female relationship for consistently tight fit up
- Smoother inner wall for better draft characteristics
- Tested and listed to UL-1738 and ULC-S636 by InterTek for sustained flue gases up to 230°F (110°C)
- Comprehensive list of approved appliance manufacturers

Engineered for Flue Gas Venting:
- EPDM gaskets have superior resistance to condensates
- Eliminates V.O.C. containing primers & glues
- Immediate use of heating system upon installation
- Faster installation
- System adjustability
- Tighter seal rated at 20” water column
- Industry leading 10’ effective vent lengths
- Lightweight for easy installation
- Easier to cut and handle
- Designed to Manage Condensates
- Kits available

Centrotherm’s InnoFlue® is proud to offer the largest selection of polypropylene based Single Wall, Common Vent and Cascade Vent System components in North America. With diameters up to 12” (315mm), InnoFlue® can support heating appliances up to 5 million BTUs.

Common Vent Systems:
Utilized in multi-unit residential and commercial buildings. Common Vent Systems have multiple appliances sharing a single vent in addition to the benefits of decreased labor and increased usable space. Common Venting reduces the number of wall and roof penetrations required. Non-Return Valves may be required to prevent the escape of combustion gases through non-operating appliances. Use of Common Vent Systems require appliance manufacturer approval.

Cascading Vent Systems:
Designed for use in large residences, multi-unit residential and commercial applications. Cascading Vent Systems allow 2 or more appliances to operate in parallel, reducing overall energy usage by modulating with demand. Cascading Vent Systems can be designed to operate in positive and negative pressure environments. Combustion air can be supplied to the appliances via Cascade Air Intake Systems, individually supplied air intake systems or room air.
InnoFlue®
Flex

Features & Benefits:

Made of corrugated polypropylene:
- Higher operating temperatures than CPVC
- 100% recyclable LEED compliant material
- Zero clearance to combustibles reduces required chase size
- Improved resistance to caustic condensates
- No leaching of appliance-damaging chlorides
- Environmentally friendly manufacturing processes

Flexible:
- Navigates offsets up to 45° eliminating the need to break open chases
- Continuous lengths up to 150'

Quality Workmanship:
- Comprehensive list of approved appliance manufacturers
- Warranty - InnoFlue® comes with an unprecedented 10 year limited manufacturer’s warranty

Engineered for Flue Gas Venting:
- Engineered for efficient installation within
- Masonry chimneys. Gypsum chases. B-Vent or L-Vent
- Can be installed from bottom or top of chase
- Advanced technology allows for easy transitioning between single wall and flex
- Custom caps available for single and multiple exhausts within any style chase
- Tested and listed to UL-1738 and ULC-S636 by Intertek for sustained flue gases up to 230°F (110°C)
- Can fit multiple exhausts & air intakes in a single chase
- Lightweight allows for easy handling and transportation
- Single wall construction allows for the most flexible vent line on the market, easily navigating offsets
- Allows for the fastest possible installation
- Immediate use of heating system upon installation

1. Masonry Chimney
When replacing a low efficiency heating appliance with a high efficiency unit, InnoFlue® Flex can be used to re-line an existing masonry chimney. Use a Base Support at the bottom of the chase where it exits the masonry chimney and transition to InnoFlue® Single Wall Residential.

2. B-Vent or L-Vent
When replacing a low efficiency heating appliance with a high efficiency unit, InnoFlue® Flex can be used to re-line an existing B-Vent. Support InnoFlue® Flex at the floor joists where it exits the B-Vent and transition to InnoFlue® Single Wall Residential.

3. Gypsum Chase
Use a new or existing gypsum chase in conjunction with InnoFlue® Flex. Install a Base Support at the bottom and transition to InnoFlue® Single Wall. At the top, use a Flex to Single Wall Coupler to transition to InnoFlue® Single Wall. Terminate with a roof flashing by others and an InnoFlue® Single Wall Termination component such as an End Pipe.
InnoFlue®
Concentric

Polypropylene & Metal Construction:
- Laser welded vent lengths and fittings are airtight, eliminating leakage experienced by inferior crimped construction
- Casted elbows and adaptors provide increased impact resistance
- Powder coated exterior creates a beautiful aesthetic, making it suitable for installation in high traffic areas
- Polypropylene interior is highly corrosion resistant, making it suitable for gas, propane and oil fired appliances
- Tested and listed to UL-1738 and ULG-S636 by InterTek for sustained flue gases up to 230°F (110°C)
- 100% recyclable LEED compliant material
- Zero clearance to combustibles
- No leaching of appliance-damaging chlorides

Engineered for Flue Gas Venting:
- Eliminates V.O.C. containing primers & glues
- Immediate use of heating system upon installation
- Faster installation
- System adjustability
- Industry leading gaskets rated at 20” water column

Concentric Design:
- Single component provides air intake and exhaust, reducing installation time
- Single penetration through roof or wall

Quality Workmanship:
- Smoother inner wall for better draft characteristics
- Comprehensive list of approved appliance manufacturers
- Warranty - InnoFlue® comes with an unprecedented 10 year limited manufacturer’s warranty
- Metal outer meets UL-723 (ASTM E84 and ULG-S102.2 25/50 flame and smoke development

Features & Benefits:

Side Wall & Vertical
Concentric design for use in areas where the venting is visible. Powder coated welded outer creates a durable aesthetically pleasing installation on direct vented appliances.

Terminations

Concentric Wall Termination
Concentric Roof Termination

Solution:
### InnoFlue® Single Wall (SW) Residential

<table>
<thead>
<tr>
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<th>Standard</th>
<th>Results</th>
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<tbody>
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<td>230°F (110°C) 248°F (120°C)</td>
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<tr>
<td>Clearance to Combustibles</td>
<td>CE EN-14471</td>
<td>0 at 230°F (110°C)</td>
</tr>
<tr>
<td>Leakage</td>
<td>UL-1738</td>
<td>Pass</td>
</tr>
<tr>
<td>Pressure</td>
<td>UL-1738 &amp; CE EN-14471</td>
<td>12.5 kPa / H1 @ 20 kPa</td>
</tr>
<tr>
<td>Pull</td>
<td>UL-1738 &amp; ULC-5636</td>
<td>Min. 101 lb force (45kg) with Connector Rings</td>
</tr>
<tr>
<td>Flame &amp; Smoke with recommended wrap</td>
<td>UL-723, ASTM E-84 &amp; ULC-S102</td>
<td>≤25 / ≤50 with recommended wrap</td>
</tr>
<tr>
<td>Fire Rating w/ recommended passive fire protection system</td>
<td>ASTM E-814, UL 1479 or ULC S115</td>
<td>2hr with recommended passive fire protection system</td>
</tr>
</tbody>
</table>

### InnoFlue® Single Wall (SW) Commercial

<table>
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### Materials & Construction

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<tr>
<th>Property</th>
<th>Low Temperature Handling</th>
<th>U.V. Stability</th>
<th>Water Absorption</th>
<th>2&quot; (50mm)</th>
<th>3&quot; (70mm)</th>
<th>3-3&quot; (80mm)</th>
<th>4&quot; (100mm)</th>
<th>5-3&quot; (120mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wall Thickness</td>
<td>ASTM G23-81</td>
<td>Pass</td>
<td>UL-1738</td>
<td>2.9mm</td>
<td>3.5mm</td>
<td>4.0mm</td>
<td>4.0mm</td>
<td>5.8mm</td>
</tr>
<tr>
<td>Deflection Temperature Under Load</td>
<td>ASTM D648-86</td>
<td>302°F (150°C)</td>
<td></td>
<td></td>
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<td></td>
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### Performance

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<td>Pressure</td>
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<td>ASTM G23-81</td>
<td>Pass</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>UL-1738</td>
<td>22%</td>
</tr>
<tr>
<td>Diameters</td>
<td>CE EN-14471</td>
<td>2” (60mm), 3” (80mm) 4” (100mm)</td>
</tr>
<tr>
<td>Deflection Temperature</td>
<td>ASTM D648-86</td>
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<tr>
<td>Low Temperature Handling</td>
<td>UL-1738</td>
<td>Pass at -4°F (-20°C)</td>
</tr>
<tr>
<td>U.V. Stability</td>
<td>ASTM G23-81</td>
<td>Pass</td>
</tr>
<tr>
<td>Water Absorption</td>
<td>UL-1738</td>
<td>22%</td>
</tr>
<tr>
<td>Diameters</td>
<td>CE EN-14471</td>
<td>2”/4” (60/100mm), 3”/5” (80/125mm), 4”/6” (100/160mm)</td>
</tr>
</tbody>
</table>

### PP Wall Thickness

<table>
<thead>
<tr>
<th></th>
<th>Internal</th>
<th>Min. Thickness</th>
<th>Max. Thickness</th>
</tr>
</thead>
<tbody>
<tr>
<td>- 2” (60mm)</td>
<td>1.7mm</td>
<td>2.0mm</td>
<td></td>
</tr>
<tr>
<td>- 3” (80mm)</td>
<td>1.8mm</td>
<td>2.2mm</td>
<td></td>
</tr>
<tr>
<td>- 4” (100mm)</td>
<td>2.7mm</td>
<td>3.0mm</td>
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</table>

### Metal Wall Thickness

<table>
<thead>
<tr>
<th></th>
<th>Internal</th>
<th>Min. Thickness</th>
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</thead>
<tbody>
<tr>
<td>- 4” (100mm)</td>
<td>14mm</td>
<td></td>
</tr>
<tr>
<td>- 5” (125mm)</td>
<td>14mm</td>
<td></td>
</tr>
<tr>
<td>- 6” (160mm)</td>
<td>14mm</td>
<td></td>
</tr>
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</table>

### Deflection Temperature Under Load

|                | ASTM D648-86 | 302°F (150°C) |

- **UL-1738** - **InnoFlue®** is the first polymeric vent system tested and listed to UL-1738, the Safety Standard for Category II, & IV flue gas venting. Listed for use with sustained flue gas temperatures to 230°F (110°C).
- **UL-5636** - **InnoFlue®** is listed to ULC-5636 Type BH Class II C, making it suitable for use where Type BH Class II A, B or C venting is specified in Canada. Listed for use with sustained flue gas temperatures to 230°F (110°C).
- **Massachusetts Plumbers Board**
  Approval code C3-0817-13 (expires 8/2/2020)