

# Annex 1

Int. Cl.: 9

Prior U.S. Cls.: 21, 23, 26, 36 and 38

**United States Patent and Trademark Office**

Reg. No. 3,665,791

Registered Aug. 11, 2009

**TRADEMARK  
PRINCIPAL REGISTER**

**TECHFLEX**

TECHFLEX, INC. (NEW JERSEY CORPORATION)  
29 BROOKFIELD DRIVE  
SPARTA, NJ 07871

THE MARK CONSISTS OF STANDARD CHARACTERS WITHOUT CLAIM TO ANY PARTICULAR FONT, STYLE, SIZE, OR COLOR.

FOR: DUCTING FOR ELECTRIC CABLES;  
SHEATHS FOR ELECTRIC CABLES, IN CLASS 9  
(U.S. CLS. 21, 23, 26, 36 AND 38).

SER. NO. 77-515,549. FILED 7-7-2008.

FIRST USE 1-1-2000; IN COMMERCE 1-1-2000.

JAY BESCH, EXAMINING ATTORNEY

Int. Cl.: 7

Prior U.S. Cls.: 13, 19, 21, 23, 31, 34 and 35

**United States Patent and Trademark Office**

Reg. No. 3,215,800

Registered Mar. 6, 2007

TRADEMARK  
PRINCIPAL REGISTER

TECHFLEX

GARLOCK SEALING TECHNOLOGIES LLC (DE-  
LAWARE LTD LIAB CO)  
1666 DIVISION STREET  
PALMYRA, NY 14522

FOR: BELTS FOR CONVEYORS, IN CLASS 7 (U.S.  
CLS. 13, 19, 21, 23, 31, 34 AND 35).

FIRST USE 0-0-1998; IN COMMERCE 0-0-1998.

THE MARK CONSISTS OF STANDARD CHAR-  
ACTERS WITHOUT CLAIM TO ANY PARTICULAR  
FONT, STYLE, SIZE, OR COLOR.

OWNER OF U.S. REG. NO. 2,358,432.

SER. NO. 78-884,938, FILED 5-16-2006.

LINDA E. BLOHM, EXAMINING ATTORNEY

Int. Cl.: 19

Prior U.S. Cls.: 1, 12, 33, and 50

United States Patent and Trademark Office

Reg. No. 2,782,200

Registered Nov. 11, 2003

TRADEMARK  
PRINCIPAL REGISTER

TEKFLEX

MINOVA INTERNATIONAL LIMITED (UNITED  
KINGDOM LTD LIAB CO)  
26 FKEETWOOD HOUSE  
CROMWELL BUSINESS PARK  
CHIPPING NORTON, OXON OX7 5SR, UNITED  
KINGDOM BY CHANGE OF NAME FOSROC  
INTERNATIONAL LIMITED (UNITED KING-  
DOM LIMITED LIABILITY COMPANY) SWIN-  
DON, WILTSHIRE SN3 1RE, UNITED KINGDOM

FOR: CEMENTITIOUS WALL AND ROOF COAT-  
INGS FOR USE IN THE MINING INDUSTRY, IN  
CLASS 19 (U.S. CLS. 1, 12, 33 AND 50).

FIRST USE 11-0-1998; IN COMMERCE 11-0-1998.

PRIORITY CLAIMED UNDER SEC. 44(D) ON  
CANADA APPLICATION NO. 1019320, FILED 6-17-  
1999, REG. NO. TMA540547, EXPIRES 1-31-2016.

SN 75-874,009, FILED 12-17-1999.

WON TEAK OH, EXAMINING ATTORNEY

Int. Cl.: 9

Prior U.S. Cls.: 21, 23, 26, 36 and 38

United States Patent and Trademark Office

Reg. No. 2,957,105

Registered May 31, 2005

TRADEMARK  
PRINCIPAL REGISTER

TECH-FLEX

GLOBAL OPTICAL RESOURCES, INC. (FLORIDA CORPORATION)  
520 ORTON AVENUE, SUITE 204  
FORT LAUDERDALE, FL 33304

FOR: SPECTACLES, GLASSES, SUNGLASSES, OPTICAL LENSES, AND SPECTACLE FRAMES, IN CLASS 9 (U.S. CLS. 21, 23, 26, 36 AND 38).

FIRST USE 4-1-2002; IN COMMERCE 4-1-2002.

THE MARK CONSISTS OF STANDARD CHARACTERS WITHOUT CLAIM TO ANY PARTICULAR FONT, STYLE, SIZE, OR COLOR.

SER. NO. 78-344,867, FILED 12-23-2003.

DOUGLAS LEE, EXAMINING ATTORNEY

Int. Cl.: 12

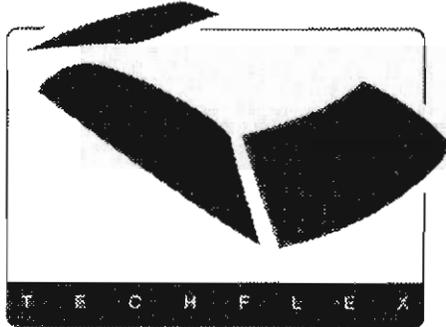
Prior U.S. Cls.: 19, 21, 23, 31, 35, and 44

United States Patent and Trademark Office

Reg. No. 3,184,800

Registered Dec. 12, 2006

TRADEMARK  
PRINCIPAL REGISTER



GUARDIAN INDUSTRIES CORP. (DELAWARE  
CORPORATION)  
2300 HARMON  
AUBURN HILLS, MI 48326

FIRST USE 5-0-2005; IN COMMERCE 5-0-2005.

SN 78-611,945, FILED 4-19-2005.

FOR: MOLDINGS FOR VEHICLE GLASS, IN  
CLASS 12 (U.S. CLS. 19, 21, 23, 31, 35 AND 44).

PAUL F. GAST, EXAMINING ATTORNEY

Int. Cl.: 25

Prior U.S. Cls.: 22 and 39

**United States Patent and Trademark Office**

Reg. No. 3,185,326

Registered Dec. 19, 2006

TRADEMARK  
PRINCIPAL REGISTER

**TEK FLEX**

PUTNAM SOURCING GROUP, INC. (CALIFORNIA CORPORATION)  
2133 EAST 38TH STREET  
LOS ANGELES, CA 90058

THE MARK CONSISTS OF STANDARD CHARACTERS WITHOUT CLAIM TO ANY PARTICULAR FONT, STYLE, SIZE, OR COLOR.

FOR: HEADWEAR, NAMELY, BASEBALL HATS, CAPS, VISORS AND FASHION HATS, IN CLASS 25 (U.S. CLS. 22 AND 39).

SER. NO. 76-645,602, FILED 8-25-2005.

FIRST USE 4-28-2005; IN COMMERCE 4-28-2005.

JOHN E. MICHOS, EXAMINING ATTORNEY

**Int. Cl.: 36**

**Prior U.S. Cls.: 100, 101 and 102**

**United States Patent and Trademark Office**

**Reg. No. 2,434,977**

**Registered Mar. 13, 2001**

**SERVICE MARK  
PRINCIPAL REGISTER**

**TECHFLEX**

ST. PAUL COMPANIES, INC., THE (MINNESOTA  
CORPORATION)  
385 WASHINGTON STREET  
ST. PAUL, MN 55102

FIRST USE 7-0-1998; IN COMMERCE 7-0-1998.

SER. NO. 75-872,561, FILED 12-15-1999.

FOR: PROPERTY INSURANCE UNDERWRIT-  
ING SERVICES FOR TECHNOLOGY COMPANIES,  
IN CLASS 36 (U.S. CLS. 100, 101 AND 102).

CHRISTOPHER ADKINS, EXAMINING ATTOR-  
NEY

**Int. Cl.: 12**

**Prior U.S. Cls.: 19, 21, 23, 31, 35 and 44**

**Reg. No. 2,421,471**

**United States Patent and Trademark Office**

**Registered Jan. 16, 2001**

**TRADEMARK  
PRINCIPAL REGISTER**

**TECHNO FLEX**

ONE INDUSTRIES (CALIFORNIA LIMITED LIABILITY COMPANY)  
1331 INDIA ST.  
SAN DIEGO, CA 92101

NO CLAIM IS MADE TO THE EXCLUSIVE RIGHT TO USE "FLEX", APART FROM THE MARK AS SHOWN.

SER. NO. 75-929,553, FILED 2-28-2000.

FOR: SEAT COVERS FOR MOTORCYCLES, IN CLASS 12 (U.S. CLS. 19, 21, 23, 31, 35 AND 44).  
FIRST USE 9-15-1999; IN COMMERCE 9-15-1999.

KAREN BRACEY, EXAMINING ATTORNEY

Int. Cl.: 9

Prior U.S. Cls.: 21, 23, 26, 36, and 38

**United States Patent and Trademark Office**

Reg. No. 3,674,159

Registered Aug. 25, 2009

**TRADEMARK  
PRINCIPAL REGISTER**

**TECH-X FLEX**

SPIRENT COMMUNICATIONS OF ROCKVILLE,  
INC. (DELAWARE CORPORATION)  
20324 SENECA MEADOWS PARKWAY  
GERMANTOWN, MD 20876

THE MARK CONSISTS OF STANDARD CHAR-  
ACTERS WITHOUT CLAIM TO ANY PARTICULAR  
FONT, STYLE, SIZE, OR COLOR.

FOR: ELECTRONIC TESTING EQUIPMENT,  
NAMELY, DEVICES FOR TESTING AND EVALUA-  
TION OF VOICE, VIDEO AND DATA COMMUNI-  
CATION NETWORKS, IN CLASS 9 (U.S. CLS. 21, 23,  
26, 36 AND 38).

OWNER OF U.S. REG. NO. 3,162,648.

SN 77-498,902, FILED 6-13-2008.

FIRST USE 6-0-2008; IN COMMERCE 6-0-2008.

ANGELA DUONG, EXAMINING ATTORNEY

**Int. Cl.: 17**

**Prior U.S. Cls.: 1, 5, 12, 13, 35 and 50**

**Reg. No. 3,006,842**

**United States Patent and Trademark Office**

**Registered Oct. 18, 2005**

**TRADEMARK  
PRINCIPAL REGISTER**

**FLEX-TECH**

FLEX-TECH HOSE & TUBING, INC. (TEXAS  
CORPORATION)  
1100 CIVIC CENTER LOOP  
SAN MARCOS, TX 78666

FIRST USE 6-1-1994; IN COMMERCE 6-1-1994.

SER. NO. 76-413,981, FILED 5-24-2002.

FOR: FLEXIBLE HOSE AND TUBING PRIMAR-  
ILY MADE FROM PLASTIC, FOR USE IN PRES-  
SURIZED AIR AND GAS SYSTEMS, IN CLASS 17  
(U.S. CLS. 1, 5, 12, 13, 35 AND 50).

TANYA AMOS, EXAMINING ATTORNEY

Int. Cl.: 13

Prior U.S. Cls.: 2 and 9

**United States Patent and Trademark Office**

Reg. No. 3,314,141

Registered Oct. 16, 2007

**TRADEMARK  
PRINCIPAL REGISTER**

**FLEXTECH**

THOMPSON CENTER ARMS COMPANY INC.  
(NEW HAMPSHIRE CORPORATION)  
FARMINGTON ROAD  
P.O. BOX 5002  
ROCHESTER, NH 03867

THE MARK CONSISTS OF STANDARD CHAR-  
ACTERS WITHOUT CLAIM TO ANY PARTICULAR  
FONT, STYLE, SIZE, OR COLOR.

FOR: GUN STOCKS, IN CLASS 13 (U.S. CLS. 2  
AND 9).

SN 78-775,993, FILED 12-19-2005.

FIRST USE 3-1-2006; IN COMMERCE 3-1-2006.

RONALD MCMORROW, EXAMINING ATTORNEY

Int. Cl.: 9

Prior U.S. Cls.: 21, 23, 26, 36, and 38

**United States Patent and Trademark Office**

Reg. No. 3,197,096

Registered Jan. 9, 2007

**TRADEMARK  
PRINCIPAL REGISTER**

**FlexTech**

WELLS LAMONT INDUSTRY GROUP, INC. (DE-  
LAWARE CORPORATION)  
6640 WEST TOUHY AVENUE  
NILES, IL 607144587

THE MARK CONSISTS OF STANDARD CHAR-  
ACTERS WITHOUT CLAIM TO ANY PARTICULAR  
FONT, STYLE, SIZE, OR COLOR.

FOR: INDUSTRIAL WORK GLOVES, IN CLASS 9  
(U.S. CLS. 21, 23, 26, 36 AND 38).

SN 76-571,153, FILED 1-20-2004.

FIRST USE 11-25-2003; IN COMMERCE 1-14-2005.

YONG KIM, EXAMINING ATTORNEY

Int. Cls.: 9 and 20

Prior U.S. Cls.: 2, 13, 21, 22, 23, 25, 26, 32, 36, 38  
and 50

Reg. No. 2,347,939

**United States Patent and Trademark Office**

Registered May 9, 2000

**TRADEMARK  
PRINCIPAL REGISTER**

**FLEXTECH**

KEWAUNEE SCIENTIFIC CORP. (DELAWARE  
CORPORATION)  
2700 WEST FRONT STREET  
STATESVILLE, NC 286772927

FOR: COMPUTER FURNITURE, NAMELY,  
COMPUTER TABLES, IN CLASS 9 (U.S. CLS. 21,  
23, 26, 36 AND 38).

FIRST USE 1-8-1997; IN COMMERCE  
1-8-1997.

FOR: FURNITURE, NAMELY, DESKS, RISER  
UNITS AND PEDESTALS FOR WORKSTA-

TIONS DESIGNED TO ACCOMMODATE THE  
TECHNICAL REQUIREMENTS AND PHYSI-  
CAL CHARACTERISTICS OF WORK AREAS,  
IN CLASS 20 (U.S. CLS. 2, 13, 22, 25, 32 AND 50).

FIRST USE 1-8-1987; IN COMMERCE  
1-8-1987.

SER. NO. 75-140,359, FILED 7-26-1996.

HOWARD SMIGA, EXAMINING ATTORNEY

Int. Cl.: 1

Prior U.S. Cls.: 1, 5, 6, 10, 26 and 46

**United States Patent and Trademark Office**

Reg. No. 3,119,009

Registered July 25, 2006

TRADEMARK  
PRINCIPAL REGISTER

**FLEX-TEC**

ENGELHARD CORPORATION (DELAWARE  
CORPORATION)  
101 WOOD AVENUE  
ISELIN, NJ 088300770

FOR: FLUID CATALYTIC CRACKING CATA-  
LYST, IN CLASS 1 (U.S. CLS. 1, 5, 6, 10, 26 AND 46).

FIRST USE 6-19-2003; IN COMMERCE 6-19-2003.

THE MARK CONSISTS OF STANDARD CHAR-  
ACTERS WITHOUT CLAIM TO ANY PARTICULAR  
FONT, STYLE, SIZE, OR COLOR.

SER. NO. 76-645,381. FILED 8-19-2005.

KATHLEEN M. VANSTON, EXAMINING ATTOR-  
NEY

Int. Cl.: 17

Prior U.S. Cls.: 1, 5, 12, 13, 35 and 50

Reg. No. 3,654,923

United States Patent and Trademark Office

Registered July 14, 2009

TRADEMARK  
PRINCIPAL REGISTER

# FLEXTEC

AGRIGÉNESE -; PRODUTOS PARA A AGRICULTURA E PECUÁRIA S.A. (PORTUGAL CORPORATION)

RUA DOS NAVEGANTES 48 R/C ESQ

P-1200-732 LISBOA

PORTUGAL

FOR: FLEXIBLE IRRIGATION PIPES, NOT OF METAL, IN CLASS 17 (U.S. CLS. 1, 5, 12, 13, 35 AND 50).

THE MARK CONSISTS OF STANDARD CHARACTERS WITHOUT CLAIM TO ANY PARTICULAR FONT, STYLE, SIZE, OR COLOR.

OWNER OF INTERNATIONAL REGISTRATION 0970033 DATED 6-3-2008, EXPIRES 6-3-2018.

SER. NO. 79-056,002, FILED 6-3-2008.

KIMBERLY PERRY, EXAMINING ATTORNEY

Int. Cl.: 16

Prior U.S. Cls.: 2, 5, 22, 23, 29, 37, 38, and 50

Reg. No. 2,907,112

**United States Patent and Trademark Office**

Registered Nov. 30, 2004

**TRADEMARK  
PRINCIPAL REGISTER**



REEMAY, INC. (SOUTH CAROLINA CORPORATION)  
70 OLD HICKORY BOULEVARD  
POST OFFICE BOX 511  
OLD HICKORY, TN 37138

ING PRINTING MACHINES, IN CLASS 16 (U.S. CLS. 2, 5, 22, 23, 29, 37, 38 AND 50).

FIRST USE 9-8-2003; IN COMMERCE 9-8-2003.

SN 76-531,956, FILED 7-14-2003.

FOR: DISPOSABLE WIPES NOT IMPREGNATED WITH CHEMICALS OR COMPOUNDS FOR CLEAN-

TARAH HARDY, EXAMINING ATTORNEY

# United States of America

United States Patent and Trademark Office

## FLEXTECH

**Reg. No. 3,796,940**

**Registered June 1, 2010**

**Int. Cl.: 16**

**TRADEMARK**

**PRINCIPAL REGISTER**

GEORGIA-PACIFIC CONSUMER PRODUCTS LP (DELAWARE LIMITED PARTNERSHIP)  
133 PEACHTREE ST, NE  
ATLANTA, GA 30303

FOR: PAPER TOWELS, IN CLASS 16 (U.S. C.I.S. 2, 5, 22, 23, 29, 37, 38 AND 50).

FIRST USE 12-0-2008; IN COMMERCE 1-0-2009.

THE MARK CONSISTS OF STANDARD CHARACTERS WITHOUT CLAIM TO ANY PARTICULAR FONT, STYLE, SIZE, OR COLOR.

SN 77-671,388, FILED 2-16-2009.

ANNE E. GUSTASON, EXAMINING ATTORNEY



*David J. Kybas*

Director of the United States Patent and Trademark Office

Int. Cl.: 1

Prior U.S. Cls.: 1, 5, 6, 10, 26 and 46

United States Patent and Trademark Office

Reg. No. 3,352,572

Registered Dec. 11, 2007

TRADEMARK  
PRINCIPAL REGISTER

# Flextec

HENKEL KGAA (FED REP GERMANY PART-  
NERSHIP LIMITED BY SHARES)  
HENKELSTRASSE 67  
40589 DÜSSELDORF  
FED REP GERMANY

FOR: CHEMICALS USED IN THE MANUFAC-  
TURE OF ADHESIVES AND SEALANTS, NAMELY,  
SILANE MODIFIED POLYMERS, IN CLASS 1 (U.S.  
CLS. 1, 5, 6, 10, 26 AND 46).

THE MARK CONSISTS OF STANDARD CHAR-  
ACTERS WITHOUT CLAIM TO ANY PARTICULAR  
FONT, STYLE, SIZE, OR COLOR.

PRIORITY DATE OF 9-10-2005 IS CLAIMED.

OWNER OF INTERNATIONAL REGISTRATION  
0885536 DATED 3-1-2006, EXPIRES 3-1-2016.

SER. NO. 79-024,090, FILED 3-1-2006.

WILLIAM ROSSMAN, EXAMINING ATTORNEY

# Annex 2



• About CE

• News

• Business Units

**We're in the business of comfort**

• Brands

And we strive for excellence in serving our customers

• Sustainability

• Careers



## CE News & Announcements

© 2011 Carrier Enterprise, LLC. All Rights Reserved. Trademarks are owned by their respective companies. With over 50 locations throughout 28 states, Puerto Rico and beyond, our vast footprint and inventory allows us to provide you what you need, when you want it, where you need it.

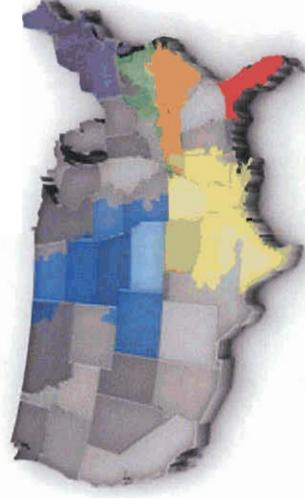


### Watsco and Carrier Complete Distribution Joint Venture Transaction in Northeast

MIAMI, May 02, 2011 (BUSINESS WIRE) — Watsco, inc. (NYSE:WSO) (Paris:WSO) today announced that it has completed its joint venture transaction with Carrier Corporation (NYSE:UTX) that includes Carrier Corporation's company-operated HVAC distribution network in the northeast United States.

Carrier's company-operated northeast distribution network had revenues of approximately \$210 million in 2010...

[\[Read More\]](#)



[View Locations »](#)

### Business Units

### CE: Same Great People - New Look

ORLANDO, FL, For Immediate Release - HVAC Contractors will start to notice a new look as Carrier Sales and Distribution (CSD) becomes Carrier Enterprise (CE).

### Comfort Products Distributing

Colorado, Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota



• About CE

• News

• Business Units

**We pride ourselves on providing the best products**

• Brands

**We are dedicated to providing the best service possible for our dealers**

• Sustainability

• Careers



## Brands



© 2011 Carrier Enterprise, LLC., All Rights Reserved. Trademarks are owned by their respective companies.

## Our Product Line

We pride ourselves on providing the best products with best-in-class customer service. Our vast footprint and inventory allows us to provide you what you need, when you want it, where you need it. Take a look below at what our manufacturers have to say about their products.

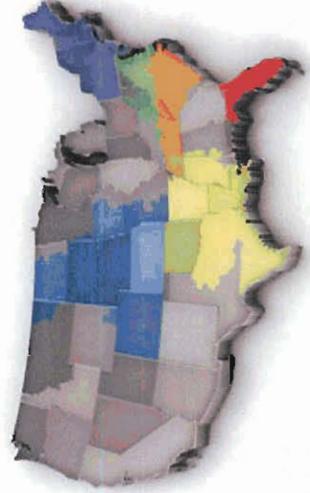
At Carrier Enterprise, we are dedicated to providing the best service possible for our dealers. [Visit the Carrier Enterprise E Storefront](#) to place your order online.



[CE Terms of Purchase](#)

[Sales to Nuclear Facilities](#)

With over 150 locations throughout 28 states, Puerto Rico and beyond, our vast footprint and inventory allows us to provide you what you need, when you want it, where you need it.



[View Locations »](#)

## Carrier

"From the time our founder invented the basics of modern air conditioning in 1902, Carrier has been the world leader in air conditioning, heating and refrigeration systems. A wholly-owned subsidiary of United Technologies Corporation, Carrier is built upon a legacy of innovation and commitment. Through our market-leading products and solutions, we are constantly striving to help people live more comfortable, healthy and productive lives..."

[Visit Carrier](#)



**Heating & Cooling Systems**

## Bryant

"Charles Bryant started a tradition in 1904 – one that goes beyond providing outstanding heating and cooling systems – that lives on today. It's about experience, trust, and doing Whatever It Takes to make our neighbors' homes comfortable.

Today, Bryant's wide range of hard-working products include gas and oil furnaces, fan coils, boilers, heat pumps, air conditioners, packaged products, humidifiers, ventilators, other air quality accessories and more. These industry-leading products are manufactured at sites across the United States. Bryant plants are among the largest heating and cooling production facilities in the world, incorporating advanced technology to maintain the highest standards possible in the design, production and quality testing of Bryant heating and cooling equipment..."

[Visit Bryant](#)

## Business Units

### Comfort Products Distributing

Colorado, Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota

### Florida Region

Florida

### Mid-Atlantic Region

Maryland, Virginia, West Virginia

### South Central Region

Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

### Southeast Region

North Carolina, South Carolina, Tennessee

### Northeast Region

New York, Massachusetts, Connecticut, New Hampshire, Maine, Pennsylvania, Rhode Island, New Jersey, Vermont

### Carrier InterAmerica (CIAC)

Central America, Caribbean and Andean Countries



## Payne

"How do we know our customers so well? Simple. Nearly 100 years of experience. There are no short cuts when building a brand that stands for dependable products at the best possible price. The same principles that made D.W. Payne and his sons successful in 1914 are still very evident today. When you choose Payne® products, you're getting more than just a name. You're getting attractive, affordable products that work. Dependability is our value. That's the Payne promise..."

[Visit Payne](#)

---



## TopTech Aftermarket Parts and Supplies

While dealing with customers can be a challenge, dealing with your supplier should not be. That is why Carrier Enterprise is committed to helping our dealers get what they need when they need it to meet the needs of their customers. From equipment and tools to parts and supplies, our stores have everything you need to get the job done right the first time. Contact us to find out the benefits and how to become a TopTech customer.

[Visit TopTech](#)

---



## The Gree GA Series

Packaged Terminal Air Conditioners and Heat Pumps (PTAC) with premium efficiency that never sounded so  
<http://www.carrierenterprise.com/brands.aspx> (3 of 4) [6/30/2011 11:33:59 AM]



- About CE
- News
- Business Units
- **We're in the business of comfort**
- Brands
- And we strive for excellence in serving our customers
- Sustainability
- Careers



## Sustainability

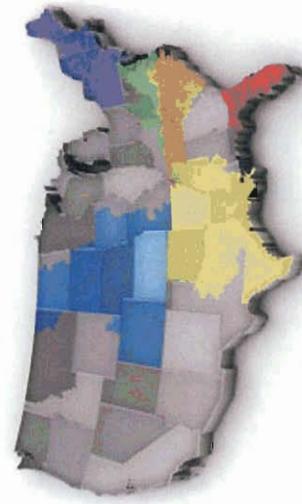


© 2011 Carrier Enterprise, LLC., All Rights Reserved. Trademarks are owned by their respective companies. All other trademarks are the property of their respective owners.

With a vast footprint throughout 28 states, Puerto Rico and beyond, our vast footprint and inventory allows us to provide you what you need, when you want it, where you need it.

CE is also committed to the sustainability of our environment. As part of the Watson, Inc. group of companies, we have launched a major initiative to a nationwide Recycling & Sustainability Service called **W-360** for our customers and facilities. Here are a few of the goals of this initiative:

1. Reduce our waste through recycling, resulting in less landfill material.
2. Provide a recycling service for our customers at our facilities to ensure our products are disposed of properly.
3. Reclaim and recycle the disposable refrigerant containers we sell to our customers, which will result in better control and prevention of greenhouse gas emissions.
4. Reduced travel (fuel) for our customers who drive to the dump themselves to dispose of metals and/or their old HVACR systems.
5. Being proactive with an initiative that could address the potential impact of upcoming federal and environmental regulations such as "Cap and Trade".



[View Locations »](#)

## Business Units

### Comfort Products Distributing

Colorado, Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota



• About CE

## New Regional Business Units

© 2011 Carrier Enterprise, LLC. All Rights Reserved. Trademarks are owned by their respective companies. **Business Units**



CE proudly distributes the Carrier, Bryant and Payne brands of HVAC equipment, as well as a full-line of aftermarket parts, supplies, and accessories. CE has over 1,600 employees ready to serve you across 150 locations throughout 28 states, Puerto Rico, the Caribbean, and Latin

America:

We pride ourselves on providing the best products with best-in-class customer service. Our vast footprint and inventory allows us to provide you what you need, when you want it, where you need it.

### Select by state:

Arkansas, Colorado, Connecticut, Florida, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Virginia, West Virginia

### Arkansas

**CE Little Rock**  
501-570-7400  
3700 West 65th Street  
Little Rock, AR 72209

**CE Tontitown**  
479-756-4500  
372 Agnes Street  
Tontitown, AR 72762

### Comfort Products Distributing

Colorado, Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota

### Florida Region

Florida

### Mid-Atlantic Region

Maryland, Virginia, West Virginia

### South Central Region

Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

### Southeast Region

North Carolina, South Carolina, Tennessee

### Northeast Region

New York, Massachusetts, Connecticut, New Hampshire, Maine, Pennsylvania, Rhode Island, New Jersey, Vermont

### Carrier InterAmerica (CIAC)

Central America, Caribbean and Andean Countries

# Annex 3





User Name:  Password:

Home   About Us   Products   Goodies   Capabilities   Online Dealers   Contact Us

### About Us

- [About Us](#)
- [Heritage](#)
- [Customer Service](#)
- [Sponsorships](#)
- [Environmental Policy](#)
- [Industry Affiliations](#)
- [News & Announcements](#)
- [Customer Projects](#)



Since 1963, Techflex has been engineering and manufacturing a wide range of braided sleeving products for a variety of industries from biomedical and aerospace to wire, hose and cable bundling protection solutions for high performance automotive enthusiasts.

Our experience with this broad market, as well as our wide selection of general purpose and high-tech specialty products, has made Techflex the first name in sleeving solutions.



#### Mission Statement

We are committed to providing the most advanced products, the widest selections, the most knowledgeable customer service and the best value to our customers.

#### ISO 9001



Customer requirements and global competitiveness are changing the way organizations around the world are doing business. Standardizing our practices into an organized and documented system provides a foundation for our comprehensive quality management programs. ISO 9001-2000 standards have helped us to better serve our customers while improving our quality systems and enabling us to be competitive in the global economy.

[Click here](#) to view certificate

© 2010 Techflex, Inc.  
 Any unauthorized reproduction, in whole or part, in any medium whatsoever, without express written permission, is prohibited.  
 Techflex product names and logos are registered trademarks of Techflex, Inc., unless otherwise attributed.  
 The contents and illustrations contained herein are believed to be reliable and accurate. Techflex makes no warranties as to their accuracy or completeness and disclaims any liability in conjunction with their use. Users should make their own evaluation as to the suitability of these products for their unique and specific applications.

#### Translate This Page

Powered by **Google Translate**

[terms of use](#)



B to B User Name: Password:     
 Login:

- [Home](#)
- [About Us](#)
- [Products](#)
- [Goodies](#)
- [Capabilities](#)
- [Online Dealers](#)
- [Contact Us](#)

## Why Sleeving?

- [Products Main](#)
- [Why Sleeving?](#)
- [Sleeving Types](#)
- [New Products](#)



We know there's more than one way to manage and protect wires and cables.

We believe sleeving is the best of all worlds when it's time to deal with harnesses, snakes and bundles, and we want to convince you that some type of sleeving will be the perfect balance of economy, ease of use and long term usability for your applications.

- |                        |                                  |                      |                                    |                                      |
|------------------------|----------------------------------|----------------------|------------------------------------|--------------------------------------|
| <b>Easy To Install</b> | <b>Reduced Weight and Volume</b> | <b>Visual Appeal</b> | <b>Economical to Use and Store</b> | <b>Flexibility and Accessibility</b> |
|------------------------|----------------------------------|----------------------|------------------------------------|--------------------------------------|

### Easy to Install

Unlike other techniques and products designed for cable management, expandable sleeving is quick and economical to install over virtually any length. Just start at one end and walk the sleeving down the entire length of the bundle. The maximum installable length is only limited by the length of the application to be covered. Bundles of wires up to 1,000 feet or more can be sleeved quickly and easily, with no special tools or skills.

Additionally, expandable sleeving will stretch up to 4 times its nominal diameter to accommodate plugs, connectors or inline splices with ease.



Expandable sleeving will accommodate plugs and connectors up to 4 times the nominal sleeving diameter.

Lengths up to 1,000 feet or longer can be covered quickly and easily.

© 2010 Techflex, Inc.  
 Any unauthorized reproduction, in whole or part, in any medium whatsoever, without express written permission, is prohibited.  
 Techflex product names and logos are registered trademarks of Techflex, Inc., unless otherwise attributed.  
 The contents and illustrations contained herein are believed to be reliable and accurate. Techflex makes no warranties as to their accuracy or completeness and disclaims any liability in conjunction with their use. Users should make their own evaluation as to the suitability of these products for their unique and specific applications.

Translate This Page



Select Language

Powered by Google Translate

[terms of use](#)

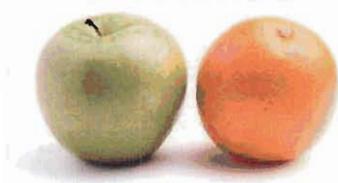


B to B  
 Login:  User Name:  Password:

[Home](#)   [About Us](#)   [Products](#)   [Goodies](#)   [Capabilities](#)   [Online Dealers](#)   [Contact Us](#)

## Sleeving Types

[Products Main](#)  
[Why Sleeving?](#)  
[Sleeving Types](#)  
[New Products](#)



Knowing the differences between the various types of sleeving can make it much easier to select the proper Techflex product for your application.

Each type of sleeving has different characteristics and properties, and each type has particular advantages under various conditions.

<b>Braided Monofilament</b>	<b>Braided Multifilament</b>	<b>Woven</b>	<b>Laminated</b>	<b>Hybrid</b>	<b>Wraparound</b>
-----------------------------	------------------------------	--------------	------------------	---------------	-------------------

### Braided Monofilament

This type of sleeving is produced from single flexible strands (filaments) of polymers or metals. Braided monofilament sleeving generally has the greatest expandability and flexibility of any of the various sleeving types, and is often used when managing bundles of wires over long lengths is necessary.

The wide expandability makes installation over existing plugs and connectors possible, and when properly matched to your application, will provide a secure and protective covering.

Additionally, braided monofilament generally has the widest choices in colors and diameters, making it the preferred choice when immediate identification of wires or managed bundles is necessary.

Breakouts of individual or multiple wires is accomplished by simply pushing the wires through the sleeving at the desired point along the harness.



The wide expandability of braided monofilament sleeving makes it ideal for managing large bundles of wires.



By combining various types of polymers in the braiding process, particular characteristics can be achieved, such as slip resistance.



Braided monofilament sleeving is routinely chosen for use in automotive wire harnesses for its flexibility, light weight and ease of installation.



Metal wires can be braided into expandable sleeving, producing strong and abrasion resistant coverings for hoses and cables.



Thicker filaments produce an extraordinarily strong and abrasion resistant sleeving without sacrificing flexibility or expandability.

© 2010 Techflex, Inc.  
 Any unauthorized reproduction, in whole or part, in any medium whatsoever, without express written permission, is prohibited.  
 Techflex product names and logos are registered trademarks of Techflex, Inc., unless otherwise attributed.  
 The contents and illustrations contained herein are believed to be reliable and accurate. Techflex makes no warranties as to their accuracy or completeness and disclaims any liability in conjunction with their use. Users should make their own evaluation as to the suitability of these products for their unique and specific applications.

Translate This Page



Select Language

Powered by  Translate

[Terms of use](#)

# Annex 4



m-w.com



Top 10 Particular Kinds of Lovers

Word Games Word of the Day New Words & Slang Video

duct

duct

27 ENTRIES FOUND:

- 1) duct (noun)
- 2) duct (verb)
- duct of Botallus

Ads by Google

Aloha Air Conditioning #1 Saturday Service No Extra Charge! 24/7 Repair Maintenance Replacement AlohaAc.com

duct *noun* \ˈdʌkt\

Definition of DUCT

- 1 : a bodily tube or vessel especially when carrying the secretion of a gland
- 2 a : a pipe, tube, or channel that conveys a substance
  - b : a pipe or tubular runway for carrying an electric power line, telephone cables, or other conductors
- 3 : a tube or elongated cavity (as a xylem vessel) in plant tissue
- 4 : a layer (as in the atmosphere or the ocean) which occurs under usually abnormal conditions and in which radio or sound waves are confined to a restricted path

- **duc-tal** *adjective*
- **duct-less** *adjective*

See duct defined for English-language learners » See duct defined for kids »

Examples of DUCT

<air ducts to provide ventilation>

Origin of DUCT

New Latin *ductus*, from Medieval Latin, aqueduct, from Latin, act of leading, from *ducere* to lead — more at TOW First Known Use: 1667

Related to DUCT

**Synonyms:** channel, conduit, pipe, leader, line, penstock, trough, tube

[+] more

Browse

Our Free Apps

Merriam-Webster's Dictionary For iPhone & iPad *New!*



Get them now!



How strong is your vocabulary?

Take our 10-question quiz to find out (and maybe learn some new words).

Take the Quiz »



Winning Words and the Champs Who Spelled Them

Top 10 Spelling Bee Winning Words



"Indubitably"

When a contestant on "So You Think You Can Dance" ... more »



Next Word in the Dictionary: ductible  
Previous Word in the Dictionary: ducky  
All Words Near: duct

“ Seen & Heard ” BETA

What made you want to look up *duct*? Please tell us where you read or heard it (including the quote, if possible).

[View Seen & Heard highlights from around the site »](#)

[Merriam-Webster on Facebook](#)

The Merriam-Webster Unabridged Dictionary



Online access to a legendary resource  
[Log In or Sign Up »](#)

Learning English? We can help.



Visit our free site designed especially for learners and teachers of English  
[LearnersDictionary.com »](#)



Our Dictionary, On Your Devices

Merriam-Webster, With Voice Search  
[Get the Free Apps! »](#)

Visit Our Store

- ▶ Mugs
- T-Shirts
- Baby & Toddler
- Pet Bowls
- Totes
- & More



Join Us

[Merriam-Webster on Twitter »](#)

[Merriam-Webster on Facebook »](#)

Bookstore: Digital and Print

Merriam-Webster references for Mobile, Kindle, print, and more. [See all »](#)

Other Merriam-Webster Dictionaries

[Webster's Unabridged Dictionary »](#)  
[WordCentral for Kids »](#)

[Learner's ESL Dictionary »](#)  
[Visual Dictionary »](#)

[Home](#) [Help](#) [About Us](#) [Shop](#) [Browser Tools](#) [Advertising Info](#)

[Pronunciation Key](#) [Privacy Policy](#) [Contact Us](#)

© 2011 Merriam-Webster, Incorporated

Browse the Dictionary: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Browse the Thesaurus: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Browse the Spanish-English Dictionary: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Browse the Medical Dictionary: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

Browse the Concise Encyclopedia: [A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

## duct - definition

[View thesaurus entry for duct](#)

**T** [Using the thesaurus](#)

NOUN [COUNTABLE] /dʌkt/

- 1 a pipe or tube in a building that carries something such as air or protects wires  
*air-conditioning ducts*  
**T** [Thesaurus entry for this meaning of duct](#)
- 2 a narrow tube that carries liquid inside your body or in an animal or plant  
*tear ducts*  
*a bile duct*  
**T** [Thesaurus entry for this meaning of duct](#)

### Related dictionary definitions

- bile duct NOUN
- duct tape NOUN
- pancreatic duct NOUN
- sweat duct NOUN



## BuzzWord

sick

Impressive, especially because of being fashionable or attractive

[BuzzWord Article](#)

### More BuzzWords

- phantonym    OMG    meme
- apronym    meh    wordle
- backronym    culturozics    mononymous

[BuzzWord archive](#)

## Open Dictionary

splitop

the act of opening the top of a soft drink can

[add a word](#)

### More submissions

- re-up    peif    macroscopic
- feft    scissure    stlitherum
- nocturnist    face blindness    pearlescent

[view entries](#)

## Word of the Day

forehand

a way of hitting the ball in tennis with the palm of your hand towards your opponent

[Word of the Day](#)

## Blog

A must for anyone with an interest in the changing face of language. The Macmillan Dictionary blog explores English as it is spoken around the world today.

[global English and language change from our blog](#)

# Annex 5

**duct** - definition

[View thesaurus entry for duct](#)

**T** [Using the thesaurus](#)

NOUN {COUNTABLE} /dʌkt/

- 1 a pipe or tube in a building that carries something such as air or protects wires  
*air-conditioning ducts*  
**T** [Thesaurus entry for this meaning of duct](#)
  
- 2 a narrow tube that carries liquid inside your body or in an animal or plant  
*tear ducts*  
*a bile duct*  
**T** [Thesaurus entry for this meaning of duct](#)

**Related dictionary definitions**

- bile duct** NOUN
- duct tape** NOUN
- pancreatic duct** NOUN
- sweat duct** NOUN



**BuzzWord**

**sick**  
impressive, especially because of being fashionable or attractive  
[BuzzWord Article](#)

More BuzzWords

- phantonym    OMG    meme
- apronym    meh    wordle
- backronym    culturomics    mononymous

[BuzzWord archive](#)

**Open Dictionary**

**splitop**  
the act of opening the top of a soft drink can  
[add a word](#)

More submissions

- re-up    pelf    macroscopic
- heft    scissure    stlitherum
- nocturnist    face blindness    pearlescent

[view entries](#)

**Word of the Day**

**forehand**  
a way of hitting the ball in tennis with the palm of your hand towards your opponent  
[Word of the Day](#)

**Blog**

A must for anyone with an interest in the changing face of language. The Macmillan Dictionary blog explores English as it is spoken around the world today.  
[global English and language change from our blog](#)

# Annex 6

# Electrical conduit

From Wikipedia, the free encyclopedia

An **electrical conduit** is an electrical piping system used for protection and routing of electrical wiring. Electrical conduit may be made of metal, plastic, fiber, or fired clay. Flexible conduit is available for special purposes.

Conduit is generally installed by electricians at the site of installation of electrical equipment. Its use, form, and installation details are often specified by wiring regulations, such as the U.S. NEC or other national or local code. The term "conduit" is commonly used by electricians to describe any system that contains electrical conductors, but the term has a more restrictive definition when used in wiring regulations.

Early electric lighting installations made use of existing gas pipe to gas light fixtures (converted to electric lamps). Since this technique provided very good protection for interior wiring, it was extended to all types of interior wiring and by the early 20th century purpose-built couplings and fittings were manufactured for electrical use.

## Contents

- 1 Comparison with other wiring methods
- 2 Types of conduit
  - 2.1 Rigid Metal Conduit (RMC)
  - 2.2 Rigid Nonmetallic Conduit (RNMC)
  - 2.3 Galvanized rigid conduit (GRC)
  - 2.4 Electrical metallic tubing (EMT)
  - 2.5 Electrical Nonmetallic Tubing (ENT)
  - 2.6 Flexible Metallic Conduit (FMC)
  - 2.7 Liquidtight Flexible Metal Conduit (LFMC)
  - 2.8 Flexible Metallic Tubing (FMT)
  - 2.9 Liquidtight Flexible Nonmetallic Conduit (LFNC)
  - 2.10 Aluminum conduit
  - 2.11 Intermediate metal conduit (IMC)
  - 2.12 PVC conduit
  - 2.13 Other metal conduits
  - 2.14 Underground conduit
- 3 Comparison of some types of conduit
- 4 Fittings
  - 4.1 Conduit bodies
- 5 Other wireways
  - 5.1 Surface Mounted Raceway (wire molding)
  - 5.2 Trunking
- 6 Passive fire protection



Electrical conduit risers, seen inside fire-resistance rated shaft, as seen entering bottom of a firestop. The firestop is made of firestop mortar on top, rockwool on the bottom. Raceways are used to protect cables from damage.



Conduit embedded into concrete structure for distribution of cables throughout this highrise apartment building in Mississauga, Ontario, Canada.



Electrical conduit and bus duct in a building at Texaco Nanticoke refinery in Nanticoke, Ontario, 1980s.

- 7 See also
- 8 Notes
- 9 Bibliography
- 10 External links

## Comparison with other wiring methods

Electrical conduit provides very good protection to enclosed conductors from impact, moisture, and chemical vapors. Varying numbers, sizes, and types of conductors can be pulled into a conduit, which simplifies design and construction compared to multiple runs of cables or the expense of customised composite cable. Wiring systems in buildings are subject to frequent alterations. Frequent wiring changes are made simpler and safer through the use of electrical conduit, as existing conductors can be withdrawn and new conductors installed, with little disruption along the path of the conduit. A conduit system can be made waterproof or submersible. Metal conduit can be used to shield sensitive circuits from electromagnetic interference, and also can prevent emission of such interference from enclosed power cables.

When installed with proper sealing fittings, a conduit will not permit the flow of flammable gases and vapors, which provides protection from fire and explosion hazard in areas handling volatile substances.

Some types of conduit are approved for direct encasement in concrete. This is commonly used in commercial buildings to allow electrical and communication outlets to be installed in the middle of large open areas. For example, retail display cases and open-office areas use floor-mounted conduit boxes to connect power and communications cables.

Both metal and plastic conduit can be bent at the job site to allow a neat installation without excessive numbers of manufactured fittings. This is particularly advantageous when following irregular or curved building profiles.

The cost of conduit installation is higher than other wiring methods due to the cost of materials and labor. In applications such as residential construction, the high degree of physical damage protection is not required so the expense of conduit is not warranted. Conductors installed within conduit cannot dissipate heat as readily as those installed in open wiring, so the current capacity of each conductor must be reduced if many are installed in one conduit. It is impractical, and prohibited by wiring regulations, to have more than 360 degrees of total bends in a run of conduit, so special outlet fittings must be provided to allow conductors to be installed without damage in such runs. While metal conduit can be used as a grounding conductor, the circuit length is limited. A long run of conduit as grounding conductor will not allow proper operation of overcurrent devices on a fault, for example.

## Types of conduit

Conduit systems are classified by the wall thickness, mechanical stiffness, and material used to make the tubing.

### Rigid Metal Conduit (RMC)

Rigid Metal Conduit (RMC) is a thick threaded tubing, usually made of coated steel, stainless steel or aluminum.

### Rigid Nonmetallic Conduit (RNMC)

Rigid Nonmetallic Conduit (RNMCM) is a non-metallic unthreaded tubing.

### **Galvanized rigid conduit (GRC)**

Galvanized rigid conduit (GRC) is galvanized steel tubing, with a tubing wall that is thick enough to allow it to be threaded. Its common applications are in commercial and industrial construction. <sup>[1]</sup>

### **Electrical metallic tubing (EMT)**

Electrical metallic tubing (EMT), sometimes called thin-wall, is commonly used instead of galvanized rigid conduit (GRC), as it is less costly and lighter than GRC. EMT itself may not be threaded, but can be used with threaded fittings that clamp to it. Lengths of conduit are connected to each other and to equipment with clamp-type fittings. Like GRC, EMT is more common in commercial and industrial buildings than in residential applications. EMT is generally made of coated steel, though it may be aluminum.

### **Electrical Nonmetallic Tubing (ENT)**

Electrical Nonmetallic Tubing (ENT) is a thin-walled corrugated tubing that is moisture-resistant and flame retardant. It is pliable such that it can be bent by hand and is often flexible although the fittings are not. It is not threaded due to its corrugated shape although the fittings might be.

### **Flexible Metallic Conduit (FMC)**

Flexible Metallic Conduit (FMC) is made through the coiling of a self-interlocked ribbed strip of aluminum or steel, forming a hollow tube through which wires can be pulled. FMC is used primarily in dry areas where it would be impractical to install EMT or other non-flexible conduit, yet where metallic strength to protect conductors is still required. The flexible tubing does not maintain any permanent bend.

FMC may be used as an equipment grounding conductor if specific provisions are met regarding the trade size and length of FMC used in addition to the amperage of the circuits contained in the conduit. In general an equipment grounding conductor must be pulled through the FMC with an ampacity suitable to carry the fault current likely imposed on the largest circuit contained within the FMC.



Flexible metallic conduit used in an underground parking facility.

### **Liquidtight Flexible Metal Conduit (LFMC)**

Liquidtight Flexible Metal Conduit (LFMC) is a metallic flexible conduit covered by a waterproof plastic coating. The interior is similar to FMC.

### **Flexible Metallic Tubing (FMT)**

Flexible Metallic Tubing (FMT) is not the same as Flexible Metallic Conduit (FMC) aka "greenfield" or "flex" which is National Electrical Code (NEC) Art 348. FMT is a raceway, but not a conduit and is a separate NEC Article - 360. It only comes in 1/2" & 3/4" trade sizes whereas FMC is sized 1/2" ~ 4" trade sizes. NEC 360.2 describes it as: "A raceway that is circular in cross section, flexible, metallic and liquidtight without a nonmetallic jacket."

## Liquidtight Flexible Nonmetallic Conduit (LFNC)

Liquidtight Flexible Nonmetallic Conduit (LNFC) refers to several types of flame-resistant non-metallic tubing. Interior surfaces may be smooth or corrugated. There may be integral reinforcement within the conduit wall. It is also known as FNMC.

## Aluminum conduit

Aluminum conduit, similar to galvanized steel conduit, is a rigid conduit, generally used in commercial and industrial applications, where a higher resistance to corrosion is needed. Such locations would include food processing plants, where large amounts of water and cleaning chemicals would make galvanized conduit unsuitable. Aluminum cannot be directly embedded in concrete, since the metal reacts with the alkalis in cement. The conduit may be coated to prevent corrosion by incidental contact with concrete. The extra cost of aluminum is somewhat offset by the lower labor cost to install, since a length of aluminum conduit will have about one-third the weight of an equally-sized rigid steel conduit.

## Intermediate metal conduit (IMC)

Intermediate Metal Conduit (IMC) is a steel tubing heavier than EMT but lighter than RMC. It may be threaded.

## PVC conduit

PVC conduit is the lightest in weight compared to other conduit materials, and usually lower in cost than other forms of conduit. In North American electrical practice, it is available in three different wall thicknesses, with the thin-wall variety only suitable for embedded use in concrete, and heavier grades suitable for direct burial and exposed work. The various fittings made for metal conduit are also made for PVC. The plastic material resists moisture and many corrosive substances, but since the tubing is non-conductive an extra bonding (grounding) conductor must be pulled into each conduit. PVC conduit may be heated and bent in the field. Joints to fittings are made with slip-on solvent-welded connections, which set up rapidly after assembly and attain full strength in about one day. Since slip-fit sections do not need to be rotated during assembly, the special union fittings used with threaded conduit (Ericson) are not required. Since PVC conduit has a higher thermal coefficient of expansion than other types, it must be mounted so as to allow for expansion and contraction of each run. Care should be taken when installing PVC underground in multiple or parallel run configurations due to mutual heating effect of cable

## Other metal conduits

In extreme corrosion environments where plastic coating of the tubing is insufficient, conduits may be made from stainless steel, bronze or brass.

## Underground conduit

Large diameter (more than 2 inch/50 mm) conduit may be installed underground between buildings to allow installation of power and communication cables. An assembly of these conduits, often called a duct bank, may either be directly buried in earth or encased in concrete.

A duct bank will allow replacement of damaged cables between buildings or additional power and communications circuits to be added, without the expense of excavation of a trench. While metal conduit is occasionally used for burial, usually PVC, polyethylene or polystyrene plastics



Plastic tubing for use as electrical conduit.

are now used due to lower cost. Formerly, compressed asbestos fiber mixed with cement was used for some underground installations. Telephone and communications circuits were installed in fired-clay conduit.

## Comparison of some types of conduit

Relative to rigid galvanized steel conduit, 3/4 inch (21 metric) size

Relative	RGS	Aluminum	IMC	EMT	PVC
Labor	1.0	0.89	0.89	0.62	0.55
Weight	1.0	0.34	0.76	0.42	0.20
Material cost	1.0	0.99	0.84	0.35	0.43

Exact ratios of installation labor, weight and material cost vary depending on the size of conduit, but the values for 3/4 inch (21 metric) trade size are representative. <sup>[2]</sup>

## Fittings

Despite the similarity to pipes used in plumbing, purpose-designed fittings are used to connect conduit.

*Box connectors* join conduit to a junction box or other electrical box. A typical box connector is inserted into a knockout in a junction box, with the threaded end then being secured with a ring (called a *lock nut*) from within the box, as a bolt would be secured by a nut. The other end of the fitting usually has a screw or compression ring which is tightened down onto the inserted conduit. Fittings for non-threaded conduits are either secured with set screws or with a compression nut that encircles the conduit. Fittings for general purpose use with metal conduits may be made of die-cast zinc, but where stronger fittings are needed, they are made of copper-free aluminum or cast iron.

*Couplings* connect two pieces of conduit together.

Sometimes the fittings are considered sufficiently conductive to *bond* (electrically unite) the metal conduit to a metal junction box (thus sharing the box's ground connection); other times, *grounding bushings* are used which have bonding jumpers from the bushing to a grounding screw on the box. <sup>[3]</sup>

Unlike water piping, if it the conduit is to be watertight, the idea is to keep water *out*, not in. In this case, the fittings have gaskets, such as the weatherhead leading from the overhead electrical mains to the electric meter.

Flexible metal conduit usually uses fittings with a clamp on the outside of the box, just like bare cables would.

## Conduit bodies

A *conduit body* can be used to provide pulling access in a run of conduit, to allow more bends to be made in a particular section of conduit, to make connections if the conduit body is rated for such use, to conserve space where a full size bend radius would be impractical or impossible, or to split a conduit path multiple directions. Conduit bodies differ from junction boxes in that they are not required to be individually supported, this makes them very useful in practical applications. Conduit bodies are commonly referred to as "*condulets*", a term trademarked by Cooper Crouse-Hinds company, a division of Cooper Industries.

Conduit bodies come in various types, moisture ratings, and materials, including galvanized steel, aluminum, and PVC. Depending on the material, they use different mechanical methods for securing conduit. Among the types are:

- L-shaped bodies ("Ells") include the LB, LL, and LR, where the inlet is in line with the access cover and the outlet is on the back, left and right, respectively. In addition to providing access to wires for pulling, "L" fittings allow a 90 degree turn in conduit where there is insufficient space for a full-radius 90 degree sweep (curved conduit section).
- T-shaped bodies ("Tees") feature an inlet in line with the access cover and outlets to both the cover's left and right.
- C-shaped bodies ("Cees") have identical openings above and below the access cover, and are used to pull conductors in a straight runs as they make no turn between inlet and outlet.
- Service "Ells" (SLBs), shorter with inlets flush with the access cover, are frequently used where a circuit passes through an exterior wall from outside to inside.

## Other wireways

### Surface Mounted Raceway (wire molding)

This type of "decorative" conduit is designed to provide an aesthetically acceptable passageway for wiring without hiding it inside or behind a wall. This is used where additional wiring is required, but where going through a wall would be difficult or require remodeling. The conduit has an open face with removable cover, secured to the surface, and wire is placed inside. Plastic raceway is often used for telecommunication wiring, such as network cables in an older structure, where it is not practical to drill through concrete block.

#### Advantages

- It allows one to add new wiring to an existing building without removing or cutting holes into the drywall or lath and plaster.
- It allows circuits to be easily locatable and accessible for future changes thus enabling minimum effort upgrades.

#### Disadvantages

- Its appearance may not be acceptable to all observers.

## Trunking

The term *trunking* is used in the United Kingdom for electrical wireways, generally rectangular in cross section with removable lids.

*Mini Trunking* is a term used in the UK for small form-factor (usually 6mm to 25mm square or rectangle sectioned) PVC wireways. <sup>[4]</sup>

In North American practice "wire trough" or "lay-in wireways" are terms used to designate similar products, but these are never used enclosed in masonry or a wall.

## Passive fire protection

Conduit is of relevance to both firestopping, where they become penetrants, and fireproofing, where circuit integrity measures can be applied on the outside to keep the internal cables operational during an accidental fire. The British standard BS476 also considers internal fires, whereby the fireproofing must protect the surroundings from cable fires. Any external treatments must consider the effect upon ampacity derating.

## See also

- Cable
- Cable tray
- Circuit integrity
- Electrical wiring
- Electrician
- Firestop
- Junction box
- Passive fire protection
- Pipe
- Pipe thread
- Panzergewinde (steel conduit thread)

## Notes

1. ^ R.K. Clidero *Applications of Electrical Construction*, General Publishing Co., Don Mills Ontario Canada, 1975, ISBN 0-7736-5011-3
2. ^ John H. Chiang, (Ed), *RS Means Electrical Cost Data 30th Annual Edition*, RSMMeans Construction Publishers, Kingston MA USA, 2007, ISBN 0-87629-856-0
3. ^ Cauldwell 2002:109.
4. ^ Mini Trunking PVC White 25 x 16mm Pack of 20 - Screwfix.com, Where the Trade Buys ([http://www.screwfix.com/prods/91619/Electrical/Conduit/Trunking/Mini-Trunking-PVC-White-25-x-16mm-Pack-of-20?cm\\_mmc=GoogleBase--Datafeed--Electrical--Mini%20Trunking%20PVC%20White%2025%20x%2016mm%20Pack%20of%2020](http://www.screwfix.com/prods/91619/Electrical/Conduit/Trunking/Mini-Trunking-PVC-White-25-x-16mm-Pack-of-20?cm_mmc=GoogleBase--Datafeed--Electrical--Mini%20Trunking%20PVC%20White%2025%20x%2016mm%20Pack%20of%2020))

## Bibliography

- Cauldwell, Rex (2002). *Wiring a House (For Pros By Pros)*. Newtown, CT, USA: Taunton Press. ISBN 1-56158-527-0.

## External links

- Electrical Conduit and Wire Weight Calculator (<http://www.muskaelectric.com/tools/conduit-and-wire-weight-calculator>)
- Conduit definition ([http://cmacable.com/index.php/terms\\_and\\_definition](http://cmacable.com/index.php/terms_and_definition))
- How to Bend Conduit Using a Pipe Bender (<http://shop.chapmanelectric.com/how-to-bend-conduit.html>)

Retrieved from "[http://en.wikipedia.org/wiki/Electrical\\_conduit](http://en.wikipedia.org/wiki/Electrical_conduit)"

Categories: Cables | Electrical wiring

- This page was last modified on 25 June 2011 at 18:02.
- Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. See Terms of use for details.

Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.

# Annex 7

# Duct (HVAC)

From Wikipedia, the free encyclopedia  
(Redirected from Ventilation duct)

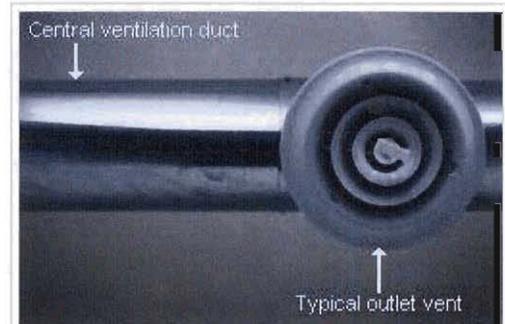
**Ducts** are used in heating, ventilation, and air conditioning (HVAC) to deliver and remove air. These needed airflows include, for example, *supply air*, *return air*, and *exhaust air*.

<sup>[1]</sup> Ducts also deliver, most commonly as part of the supply air, *ventilation air*. As such, air ducts are one method of ensuring acceptable indoor air quality as well as thermal comfort.

A duct system is often called **ductwork**. Planning ('laying out'), sizing, optimizing, detailing, and finding the pressure losses through a duct system is called **duct design**.<sup>[2]</sup>

## Contents

- 1 Materials
  - 1.1 Polyurethane and Phenolic insulation panels (pre-insulated air ducts)
  - 1.2 Fiberglass duct board (preinsulated non metallic ductwork)
  - 1.3 Flexible Ducting
  - 1.4 Fabric
- 2 Duct system components
  - 2.1 Vibration isolators
  - 2.2 Take-offs
  - 2.3 Stacks, boots, and heads
  - 2.4 Volume Control Dampers
  - 2.5 Smoke/Fire Dampers
  - 2.6 Plenums
  - 2.7 Terminal units
  - 2.8 Air terminals
- 3 Duct cleaning
  - 3.1 Signs and indicators
- 4 Duct sealing
- 5 References
- 6 Further reading
- 7 See also



A round galvanized steel duct connecting to a typical diffuser



Fire-resistance rated mechanical shaft with HVAC sheet metal ducting and copper piping, as well as "HOW" (Head-Of-Wall) joint between top of concrete block wall and underside of concrete slab, firestopped with ceramic fibre-based firestop caulking on top of rockwool.

## Materials

Ducts can be made out of the following materials:

Galvanized mild steel is the standard and most common material used in fabricating ductwork.

## **Polyurethane and Phenolic insulation panels (pre-insulated air ducts)**

Traditionally, air ductwork is made of sheet metal which is installed first and then lagged with insulation as a secondary operation. Ductwork manufactured from rigid insulation panels does not need any further insulation and is installed in a single fix. Light weight and installation speed are among the features of preinsulated aluminium ductwork, also custom or special shapes of ducts can be easily fabricated in the shop or on site.

The ductwork construction starts with the tracing of the duct outline onto the aluminium preinsulated panel, then the parts are typically cut at 45 degree, bent if required to obtain the different fittings (i.e. elbows, tapers) and finally assembled with glue. Aluminium tape is applied to all seams where the external surface of the aluminium foil has been cut. A variety of flanges are available to suit various installation requirements. All internal joints are sealed with sealant.

Among the various types of rigid polyurethane foam panels available, a new water formulated panel stands out. In this particular panel, the foaming process is obtained through the use of water instead of the CFC, HCFC, HFC and HC gasses. And most manufacturers of rigid polyurethane foam panels use normal pentane as foaming agent instead of the CFC, HCFC, HFC and HC gasses, so do manufacturers of rigid phenolic foam panels.

A rigid phenolic insulation ductwork system is available and complies with the UL 181 standard for class 1 air ductwork.

Both polyurethane foam panels and phenolic foam panels are then coated with aluminum sheets on both sides, with outside aluminum thicknesses that can vary from 80 micrometres for indoor use to 200 micrometres for external use or high air pressure in order to guarantee the high mechanical characteristics of the duct, or then coated with aluminum sheets on inside, and coated with 200 micrometres sheet metal or pre-painted sheet metal on outside.

## **Fiberglass duct board (preinsulated non metallic ductwork)**

Fiberglass duct board panels provide built-in thermal insulation and the interior surface absorbs sound, helping to provide quiet operation of the HVAC system. The duct board is formed by sliding a specially-designed knife along the board using a straightedge as a guide; the knife automatically trims out a "valley" with 45° sides; the valley does not quite penetrate the entire depth of the duct board, providing a thin section that acts as a hinge. The duct board can then be folded along the valleys to produce 90° folds, making the rectangular duct shape in the fabricator's desired size. The duct is then closed with staples and special aluminum or similar 'metal-backed' tape. Commonly available duct tape should not be used on air ducts, metal, fiberglass, or otherwise, that are intended for long-term use; the adhesive on so called 'duct tape' dries and releases with time.

## **Flexible Ducting**

Flexible ducts, known as *flex*, have a variety of configurations, but for HVAC applications, they are typically flexible plastic over a metal wire coil to make round, flexible duct. In the United States, the insulation is usually glass wool, but other markets such as Australia, use both polyester fibre and glass wool for thermal insulation. A protective layer surrounds the insulation, and is usually composed of polyethylene or metalised PET. Flexible duct is very convenient for attaching supply air outlets to the rigid ductwork. However, the pressure loss through flex is higher than for most other types of ducts. As such, designers and installers attempt to keep their installed lengths (*runs*) short, e.g., less than 15 feet or so, and to minimize turns.

Kinks in flex must be avoided. Some flexible duct markets prefer to avoid using flexible duct on the return air portions of HVAC systems, however flexible duct can tolerate moderate *negative pressures* - the UL181 test requires a negative pressure of 200 Pa.<sup>[3]</sup>

## Fabric

Fabric ducting, also known as air socks, duct socks or textile ducts, are designed for even air distribution throughout the entire length. Usually made of special polyester material, fabric ducts can provide air to a space more effectively than a conventional exposed duct system.



Example of flexible ducting.

Fabric duct is a misnomer as "fabric duct" is actually an "air distribution device" and is not intended as a conduit (duct) for conditioned air. However, as it often replaces hard or metal ductwork it is easy to perceive it simply as duct. Fabric air dispersion systems, is the more definitive name. As they may be manufactured with venting or orifices for even air distribution along any length of the system, they commonly will provide a more even distribution and blending of the conditioned air in a given space. As "fabric duct" is used for air distribution, textile ducts are not rated for nor should they be used in ceilings or concealed attic spaces. Applications for fabric duct in raise floor applications; however, are available. Depending on the manufacturer, "fabric duct" is available in standard and custom colours with options for silk screening or other forms of appliques.

"Fabric duct", depending on the manufacturer, may be available in air permeable(porous) or non-porous fabric. As a benchmark, a designer may make the determination of which fabric is more applicable by asking the question if the application would require insulated metal duct? If metal duct would be insulated in a given application or installation, air permeable fabric would be recommended as it will not commonly create condensation on its surface and can therefore be used where air is to be supplied below the dew point. Again; depending on the material and manufacturer, material that eliminates moisture may also be healthier and may also be provided with an active anti-microbial agent to inhibit bacteria growth. Porous material also tends to require less maintenance as it repels dust and other airborne contaminants.

## Duct system components

Besides the ducts themselves, complete ducting systems contain many other components.

### Vibration isolators

A duct system often begins at an air handler. The blowers in the air handlers can create substantial vibration and the large area of the duct system would transmit this noise and vibration to the inhabitants of the building. To avoid this, *vibration isolators* (flexible sections) are normally inserted into the duct immediately before and after the air handler. The rubberized canvas-like material of these sections allow the air handler to vibrate without transmitting much vibration to the attached ducts.

### Take-offs

Downstream of the air handler, the supply air **trunk duct** will commonly fork, providing air to many individual air outlets such as diffusers, grilles, and registers. When the system is designed with a main

duct branching into many subsidiary **branch ducts**, fittings called *take-offs* allow a small portion of the flow in the main duct to be diverted into each branch duct. Take-offs may be fitted into round or rectangular openings cut into the wall of the main duct. The take-off commonly has many small metal tabs that are then bent to retain the take-off on the main duct; round versions are called *spin-in fittings*. Other take-off designs use a snap-in attachment method, sometimes coupled with an adhesive foam gasket to provide improved sealing. The outlet of the take-off then connects to the rectangular, oval, or round branch duct.

## Stacks, boots, and heads

Ducts, especially in homes, must often allow air to travel vertically within relatively thin walls. These vertical ducts are called *stacks* and are formed with either very wide and relatively thin rectangular sections or oval sections. At the bottom of the stack, a *stack boot* provides a transition from an ordinary large round or rectangular duct to the thin wall-mounted duct. At the top, a *stack head* can provide a transition back to ordinary ducting while a *register head* allows the transition to a wall-mounted air register.

## Volume Control Dampers

Ducting systems must often provide a method of adjusting the volume of air flow to various parts of the system. VCDs (Volume Control Dampers - Not To Be confused with Smoke/Fire Dampers) provide this function. Besides the regulation provided at the registers or diffusers that spread air into individual rooms, dampers can be fitted within the ducts themselves. These dampers may be manual or automatic. Zone dampers provide automatic control in simple systems while VAVs allow control in sophisticated systems.

## Smoke/Fire Dampers

Smoke and Fire dampers are found in ductwork, where the duct passes through a firewall or firecurtain. Smoke dampers are automated with the use of a mechanical motor often referred to as an Actuator. A probe connected to the motor is installed in the run of duct, and detects smoke within the duct system which has been extracted from a room, or which is being supplied from the AHU (Air Handling Unit) or elsewhere within the run. Once smoke is detected within the duct, the Actuator triggers the motor release and the smoke damper will automatically close until manually re-opened.

You will also find Fire dampers in the same places as smoke dampers, depending on the application of the area after the firewall. Unlike smoke dampers, they are not triggered by any electrical system, which is perfect in the event of an electrical failure where the Smoke dampers would fail to close. A fire damper is held open by a bar crossing the corrugated screen, which will break and allow the damper to close when air in the duct is above a certain temperature. This again will then have to be manually re-opened.

## Plenums

Plenums are the central distribution and collection units for an HVAC system. The return plenum carries the air from several large return grills (vents) to a central air handler. The supply plenum directs air from the central unit to the rooms which the system is designed to heat or cool.

## Terminal units

While single-zone constant air volume systems typically don't have them, other types of air distribution systems often have **terminal units** in the branch ducts. Usually there is one terminal unit per thermal zone. Some types of terminal units are VAV 'boxes' of either single or dual duct, fan-powered mixing boxes of either parallel or series arrangement, and induction terminal units. Terminal units may also include either, or both, a heating or cooling coil.

### Air terminals

'Air terminals' are the supply air outlets and 'return' or 'exhaust air inlets'. For supply, diffusers are most common, but grilles, and for very small HVAC systems such as in residences, 'registers' are also used widely. Return or 'exhaust grilles' are used primarily for appearance reasons, but some also incorporate an air filter and are known as 'filter returns'.<sup>[4]</sup>

## Duct cleaning

The position of the U.S. Environmental Protection Agency (EPA) is that "If no one in your household suffers from allergies or unexplained symptoms or illnesses and if, after a visual inspection of the inside of the ducts, you see no indication that your air ducts are contaminated with large deposits of dust or mold (no musty odor or visible mold growth), having your air ducts cleaned is probably unnecessary."<sup>[5]</sup>

Studies by the EPA and the Canadian Mortgage and Housing Corporation (CMHC) in the 1990s has lead CMHC to conclude that "duct cleaning will not usually change the quality of the air you breathe, nor will it significantly affect airflows or heating costs".<sup>[6]</sup>

### Signs and indicators

- When cleaning, you need to sweep and dust your furniture more than usual.
- After cleaning, there's still left over dust floating around the house that you can see.
- After or during sleep you experience headaches, nasal congestion, or other sinus problems.
- Rooms in your house have little or no air flow coming from the vents.
- You're constantly getting sick or are experience more allergies than usual
- When you turn on the furnace or air conditioner there's musty or stale odor
- You're experiencing signs of sickness: fatigue, headache, sneezing, stuffy or running nose, irritability, nausea, dry or burning sensation in eyes, nose and throat.<sup>[7]</sup>

## Duct sealing

Duct Sealing is the sealing of leaks in air ducts in order to reduce air leakage, optimize efficiency, and control entry of pollutants into the home or building. Air pressure combined with air duct leakage can lead to a loss of energy in a HVAC system and duct sealing solves issues of energy loss in the system.

Duct tape is not used for sealing ducts. Building codes call for special fire-resistant tapes, often with foil backings and long lasting adhesives.

Signs of leaky or poorly performing air ducts include:

- Utility bills in winter and summer months above average relative to rate fluctuation

- Spaces or rooms that are difficult to heat or cool
- Duct location in an attic, attached garage, leaky floor cavity, crawl space or unheated basement.<sup>[8]</sup>

## References

1. ^ The Fundamentals volume of the *ASHRAE Handbook*, ASHRAE, Inc., Atlanta, GA, USA, 2005
2. ^ *HVAC Systems -- Duct Design*, 3rd Ed., SMACNA, 1990
3. ^ "Factory-Made Air Ducts and Air Connectors UL 181", UL Standards, retrieved September 2, 2009
4. ^ *Designer's Guide to Ceiling-Based Room Air Diffusion*, Rock and Zhu, ASHRAE, Inc., Atlanta, GA, USA, 2002
5. ^ "Should You Have the Air Ducts in Your Home Cleaned?", U.S. Environmental Protection Agency, retrieved April 17, 2008
6. ^ "Should You Get Your Heating Ducts Cleaned?", Canadian Mortgage and Housing Corporation, retrieved April 17, 2008
7. ^ Air Conditioning Explained, retrieved 27 July 2009
8. ^ [1]

## Further reading

- *Air Diffusion Council Flexible Duct Performance and Installation Standard*, 4th Ed., 2003

## See also

- Duct (industrial exhaust)
- Darcy friction factor

Retrieved from "[http://en.wikipedia.org/wiki/Duct\\_\(HVAC\)](http://en.wikipedia.org/wiki/Duct_(HVAC))"

Categories: Heating, ventilating, and air conditioning

---

- This page was last modified on 21 May 2011 at 04:00.
- Text is available under the Creative Commons Attribution-ShareAlike License; additional terms may apply. See Terms of use for details.  
Wikipedia® is a registered trademark of the Wikimedia Foundation, Inc., a non-profit organization.

# Annex 8



**United States Patent and Trademark Office**

[Home](#) | [Site Index](#) | [Search](#) | [FAQ](#) | [Glossary](#) | [Guides](#) | [Contacts](#) | [eBusiness](#) | [eBiz alerts](#) | [News](#) | [Help](#)

[Trademarks](#) > Trademark Acceptable Identification of Goods & Services

# Trademark ID Manual

Refine Search:

Documents: 1 - 23 of 23

Hit No.	Class	Description	Status	Effective Date	Type	Note	Trilateral
1	006	Ducts and pipes of metal for central heating installations	A	08 Nov 07	G	N	T
2	006	Ducts of metal for air-conditioning installations	A	27 Jan 11	G	N	T
3	006	Ducts of metal for ventilating installations	A	30 Dec 10	G	N	T
4	006	Metal air conditioning ducts	A	01 Jun 04	G	N	
5	006	Metal heating ducts	A	01 Jun 04	G	N	
6	006	Metal vent cover for HVAC ducts	A	01 Dec 05	G	N	
7	006	Ventilating ducts of metal	M	15 Mar 93	G	N	
8	009	Electrical ducts	A	01 Jun 01	G	N	
9	011	Accessories for fireplaces, namely, air circulation kits consisting primarily of metal ducts and metal adaptors used to increase the amount of heat recovered from the fireplace using a blower or natural convection	A	28 Oct 10	G	N	
10	011	Dampers, namely, control devices used in air ducts to regulate the flow of air	A	15 Mar 07	G	N	
11	011	Decorative grills made of non-metal non-combustible materials for use in decorating evacuation ducts, air inlets, and hot air outlets of fireplaces	A	21 Oct 10	G	N	
12	011	Fabric air dispersion ducts for distributing and dispensing air as part of a HVAC system	A	26 Mar 09	G	N	
13	011	Industrial electric oscillating fans for automatic cleaning of ceilings, light fixtures, ducts and other overhead structures exposed to fibrous airborne contaminants	A	18 Nov 10	G	N	
14	017	Air duct adhesive sealant compounds for use in the heating and cooling industry	A	01 Apr 10	G	N	
15	017	Duct tape	A	02 Apr 91	G	N	
16	017	Insulation materials, namely, composite sheets and panels comprising a reinforced cement core mechanically bonded to steel sheets on both outer surfaces for use in barriers, doors, ducts and ceilings	A	01 Jul 10	G	N	

17	019	Non-metal air conditioning ducts	A	01 Jun 04	G	N
18	019	Non-metal ducts [not for electrical circuitry]	A	01 Jan 95	G	N
19	019	Non-metal heating ducts	A	01 Jun 04	G	N
20	019	Non-metal vent cover for HVAC ducts	M	26 Jun 08	G	Y
21	019	Non-metal ventilating ducts	A	01 Jul 01	G	N
22	020	Plastic ducts and couplings for organizing and holding fiber optic and similar cable and wiring	A	26 Mar 09	G	N
23	037	Air duct cleaning services	A	01 Jun 01	S	N

Refined Search:

[Return to Search](#)

[HOME](#) [SITE INDEX](#) [SEARCH](#) [BUSINESS HELP](#) [PRIVACY POLICY](#)



# Annex 9



- About CE

News  
**Regional Business Units**



CE proudly distributes the Carrier, Bryant and Payne brands of HVAC equipment, as well as a full-line of aftermarket parts, supplies, and accessories. CE has over 1,600 employees ready to serve you across 150 locations throughout 28 states, Puerto Rico, the Caribbean, and Latin

- Sustainability

Americas

powered by  
**Business Units**

**Comfort Products Distributing**

Colorado, Iowa, Kansas, Missouri, Nebraska, North Dakota, South Dakota

**Florida Region**

Florida

**Mid-Atlantic Region**

Maryland, Virginia, West Virginia

**South Central Region**

Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, Texas

**Southeast Region**

North Carolina, South Carolina, Tennessee

**Northeast Region**

New York, Massachusetts, Connecticut, New Hampshire, Maine, Pennsylvania, Rhode Island, New Jersey, Vermont

**Carrier InterAmerica (CIAC)**

Central America, Caribbean and Andean Countries

We pride ourselves on providing the best products with best-in-class customer service. Our vast footprint and inventory allows us to provide you what you need, when you want it, where you need it.

**Select by state:**

Arkansas, Colorado, Connecticut, Florida, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Oklahoma, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Virginia, West Virginia

**Arkansas**

**CE Little Rock**

501-570-7400  
 3700 West 65th Street  
 Little Rock, AR 72209

**CE Tonitown**

479-756-4500  
 372 Agnes Street  
 Tonitown, AR 72762

Region: South Central

Region: South Central

## Colorado

### CPD Denver

303-893-1120  
2540 W 5th Ave  
Denver, CO 80204  
Region: Comfort Products

### CPD Loveland

970-282-75863  
951 McAuthor Ave  
Loveland, CO 80525  
Region: Comfort Products

[Back to top](#)

## Connecticut

70 Meadow Street  
Hartford, CT 06114  
Phone: 860-296-4533  
Fax: 860-296-4517

185 Wallace St  
New Haven, CT 06511  
Phone: 203-821-3033  
Fax: 203-821-3039

4 Wilton Ave  
Norwalk, CT 06851  
Phone: 203-840-4949  
Fax: 203-840-4950

[Back to top](#)

650 Long Beach Blvd  
Stratford, CT 06615  
Phone: 203-375-6390  
Fax: 203-375-7920

## Florida

### CE Dania Beach, FL

954-926-516  
1257 Bryan Road  
Dania Beach, FL 33004  
Region: Florida

### CE Jacksonville, FL

800-654-5709  
8691 Western Way  
Jacksonville, FL 32256  
Region: Florida

### CE Kissimmee, FL

866-481-0756  
931 Armstrong Boulevard  
Kissimmee, FL 34741  
Region: Florida

### CE Largo, FL

800-637-7712  
7370 124th Ave North  
Largo, FL 33773  
Region: Florida

### CE Ocala, FL

866-854-5962  
1120 SW 12th Street  
Ocala, FL 34474  
Region: Florida

### CE Orlando, FL

800-521-0625  
2000 Parks Oaks Ave  
Orlando, FL 32808  
Region: Florida

### CE Pompano Beach, FL

### CE Tallahassee

### CE Tampa Hub

800-917-4669  
 3250 Park Central Blvd N  
 Pompano Beach, FL 33069  
 Region: Florida

850-574-4296  
 122 Hamilton Park Drive  
 Tallahassee, FL 32304  
 Region: Florida

813-241-6010  
 1802 Grant Street  
 Tampa, FL 33605  
 Region: Florida

**CE Parts and Supplies- South**

**Dade**

305-254-5608  
 15975 SW 117th Ave.  
 Miami, FL 33177  
 Region: Florida

**CE Parts and Supplies- Daytona Beach, FL**

800-839-6606  
 701 Fentress Blvd  
 Daytona Beach, FL 32117  
 Region: Florida

**CE Parts and Supplies-Ft Myers, FL**

800-282-8342  
 7916 Drew Cir.  
 Fort Myers, FL 33912  
 Region: Florida

**CE Parts and Supplies-Miami, FL**

800-867-9060  
 4555 NW 72nd Ave  
 Miami, FL 33166  
 Region: Florida

**CE Parts and Supplies- Orlando, FL**

800-521-0625  
 3071 N Orange Blossom Trail#F  
 Orlando, FL 32804  
 Region: Florida

**CE Parts and Supplies- Sarasota, FL**

800-366-8050  
 1940 13th Street  
 Sarasota, FL 34236  
 Region: Florida

**CE Parts and Supplies- Tampa, FL**

800-922-5065  
 1802 Grant St.Ste 100  
 Tampa, FL 33610  
 Region: Florida

**CE Parts and Supplies- Melbourne, FL**

800-732-7286  
 7200 Technology Drive  
 W Melbourne, FL 32904  
 Region: Florida

**CE Parts and Supplies-W Palm Beach, FL**

877-508-3485  
 1500 N Florida Mango Rd  
 Bldg 1 Suite 4  
 West Palm Beach, FL 33409  
 Region: Florida

[Back to top](#)

**IOWA**

**CPD Cedar Falls**

319-277-3949  
 5529 Nordic Drive  
 Cedar Falls, IA 50613  
 Region: Comfort Products

**CPD Des Moines**

515-331-3743  
 4101 NW 121st Street  
 Urbandale, IA 50323  
 Region: Comfort Products

[Back to top](#)

**Kansas**

**CPD Lenexa**

913-888-0202  
 15470 W 110th Street  
 Lenexa, KS 66219  
 Region: Comfort Products

**CPD Wichita**

316-942-2254  
 3005 West Harry  
 Wichita, KS 67213  
 Region: Comfort Products

[Back to top](#)

## Louisiana

### CE Baton Rouge

225-292-19701  
0642 Alco Dr.  
Baton Rouge, LA 70816  
Region: South Central

### CE Harahan

504-733-8662  
312 Time Saver Ave.  
Harahan, LA 70123  
Region: South Central

### CE Lafayette

337-234-1809  
2400 Cameron St.  
Lafayette, LA 70506  
Region: South Central

### CE Mandeville

985-893-9110  
68399 James St.  
Suites A & B  
Mandeville, LA 70471  
Region: South Central

### CE Shreveport

318-868-3700  
805 W. 62nd St.  
Shreveport, LA 71106  
Region: South Central

[Back to top](#)

## Maine

6 Lincoln Avenue, Suite C  
Scarborough, ME 04074  
Phone: 207-885-0140  
Fax: 207-885-0152

[Back to top](#)

## Maryland

### CE Baltimore/White Marsh, MDCE Fredrick, MD

410-391-4600  
9601 Pulaski Park Dr.,  
Suite 408.  
Baltimore, MD 21220  
Region: Mid-Atlantic

301-228-2688  
4615 Wedgewood Blvd.  
Fredrick, MD 21703  
Region: Mid-Atlantic

### CE Gaithersburg, MD

240-683-8610  
9230 Gaither Rd  
Gaithersburg, MD 20877  
Region: Mid-Atlantic

### CE Hanover/Glen Burnie, MD

410-981-4410  
7010 Dorsey Rd  
Hanover, MD 21076  
Region: Mid-Atlantic

301-470-1703  
13200 Mid Atlantic Blvd.  
Suite 100  
Laurel, MD 20708  
Region: Mid-Atlantic

### CE Waldorf, MD

301-705-5001  
104 Paul Mellon Ct.  
Waldorf, MD 20602  
Region: Mid-Atlantic

[Back to top](#)

## Massachusetts

101 B Millbury Street  
Auburn, MA 01501  
Phone: 508-832-0501  
Fax: 508-832-7076

655 Bodwell St Ext  
Avon, MA 02322  
Phone: 508-894-8540  
Fax: 508-894-3040

192 Airport Rd  
Hyannis, MA 02601  
Phone: 508-790-1111  
Fax: 508-790-1140

467 Cottage St  
Springfield, MA 01104  
Phone: 413-739-6045  
Fax: 413-739-6630

130 Commerce Way  
Woburn, MA 01801  
Phone: 781-937-7600  
Fax: 781-937-7609

[Back to top](#)

## Mississippi

**CE Pearl**  
601-939-3991  
2108 Hwy. 80 East  
Pearl, MS 39208  
Region: South Central

**CE Tupelo**  
662-841-7434  
270 Whitaker Drive  
Tupelo, MS 38804  
Region: South Central

[Back to top](#)

## Missouri

**CPD Columbia**  
573-474-3408  
1611 Burlington Street  
Columbia, MO 65202  
Region: Comfort Products

**CPD NKC**  
816-471-3773  
1821 Bedford Street  
KC, MO 64116  
Region: Comfort Products

**CPD Springfield**  
417-863-0991  
1360 E Chestnut Exp  
Springfield, MO 65802  
Region: Comfort Products

[Back to top](#)

## Nebraska

**CPD Omaha**  
402-334-7777  
13202 I Street  
Omaha, NE 68137  
Region: Comfort Products

[Back to top](#)

## New Hampshire

520 E. Industrial Pk Dr  
Manchester, NH 03109  
Phone: 603-623-1215  
Fax: 603-624-0649

[Back to top](#)

## New Mexico

**CPD Albuquerque**  
505-884-1460  
3405 Candelaria NE  
Albuquerque, NM 87107  
Region: Comfort Products

[Back to top](#)

## New York

21 Crossways East  
Bohemia, NY 11716  
Phone: 631-588-2181  
Fax: 631-218-8104

445 Coney Island Boulevard  
Brooklyn, NY 11218  
Phone: 718-287-5927  
Fax: 718-287-6134

Central Ave., Suite 300  
Farmingdale, NY 11735  
Phone: 631-501-5720  
Fax: 631-501-5733

48-23 55th Ave  
Maspeth, NY 11378  
Phone: 718-472-0200  
Fax: 718-472-6330

20 Post Road  
Colonie, NY 12205  
Phone: 518-456-3050  
Fax: 518-456-5059

2640 Walden Ave  
Buffalo, NY 14225  
Phone: 716-681-4850  
Fax: 716-681-9028

105 Mushroom Blvd  
Rochester, NY 14623  
Phone: 585-232-4980  
Fax: 585-232-7558

1401 Erie Blvd East  
Syracuse, NY 13210  
Phone: 315-476-6660  
Fax: 315-476-4190

Youngman Dev. Park  
1000 Young St Suite 400  
Tonawanda, NY 14150  
Phone: 716-692-9200  
Fax: 716-692-9303

[Back to top](#)

## New Jersey

1935 Swarthmore Ave  
Lakewood, NJ 08701  
Phone: 732-905-8080  
Fax: 732-905-0461

21-31 Colonial Dr  
Piscataway, NJ 08854  
Phone: 732-463-2745  
Fax: 732-463-2790

241 Clinton Road  
West Caldwell, NJ 07006  
Phone: 973-575-9413  
Fax: 973-227-8010

[Back to top](#)

## North Carolina

**CE Asheville, NC**  
828-670-9104  
#9 Dogwood Road  
Asheville, NC 28806  
Region: Southeast

**CE Gastonia, NC**  
704-854-9914  
832 N. Marrietta Street  
Gastonia, NC 28054  
Region: Southeast

**CE Hickory, NC**  
828-327-209  
91707 HWY 70 SW  
Hickory, NC 28602  
Region: Southeast

**CE Raleigh, NC**  
919-250-6800  
1711 Corporation Pkwy  
Raleigh, NC 27604  
Region: Southeast

**CE Charlotte, NC**  
704-394-7311  
4300 Golf Acres Drive  
Charlotte, NC 28208  
Region: Southeast

**CE Greensboro, NC**  
336-299-3131  
7203 W. Friendly Ave  
Greensboro, NC 27410  
Region: Southeast

**CE Matthews, NC**  
704-845-1188  
474 W. Matthews Street  
Matthews, NC 28105  
Region: Southeast

**CE Wilmington, NC**  
910-251-0080  
307 Marlboro Street  
Wilmington, NC 28403  
Region: Southeast

**CE Fayetteville, NC**  
910-425-6175  
5217 Raeford Road  
Fayetteville, NC 28304  
Region: Southeast

**CE Greenville, NC**  
252-321-6290  
2298 County Home Rd  
Greenville, NC 27858  
Region: Southeast

**CE Morrisville, NC**  
919-467-6863  
300 Dominion Drive  
Morrisville, NC 27560  
Region: Southeast

**CE Winston-Salem, NC**  
336-661-0070  
104 Progress Court  
Winston-Salem, NC 27106  
Region: Southeast

[Back to top](#)

## North Dakota

**CPD Bismarck**  
701-221-3283  
1224 Airport Road  
Bismarck, ND 58504  
Region: Comfort Products

[Back to top](#)

## Pennsylvania

1825 Peninsula Dr  
Erie, PA 16505  
Phone: 814-833-4381  
Fax: 814-833-4026

720 E. Lacock St.  
Pittsburgh, PA 15212  
Phone: 412-471-1419  
Fax: 412-323-9434

[Back to top](#)

## Oklahoma

**CE Oklahoma City**  
405-951-6630  
315 Hudiburg Circle  
Oklahoma City, OK 73108  
Region: South Central

**CE Tulsa**  
918-664-4187  
10405G E. 56th Place S.  
Tulsa, OK 74146  
Region: South Central

[Back to top](#)

## Rhode Island

33 Plan Way  
Warwick, RI 02886  
Phone: 401-732-7090  
Fax: 401-739-3901

## South Carolina

**CE Charleston, SC**  
843-554-0651  
4460 Tile Drive  
Charleston, SC 29405  
Region: Southeast

**CE Columbia, SC**  
803-736-7770  
230 Business Park Blvd  
Columbia, SC 29203  
Region: Southeast

**CE Florence, SC**  
843-662-4593  
1505 N. Schlitz Drive  
Florence, SC 29501  
Region: Southeast

**CE Greenville, SC**  
864-232-6633  
1025 Lowndes Hill Road  
Greenville, SC 29607  
Region: Southeast

**CE Myrtle Beach, SC**  
843-448-1128  
1608 Executive Drive  
Myrtle Beach, SC 29577  
Region: Southeast

[Back to top](#)

## South Dakota

### CPD Rapid City

605-355-0287  
2885 N Plaza Drive  
Rapid City, SD 57702  
Region: Comfort Products

### CPD Sioux Falls

605-334-7777  
1420 North Minnesota  
Sioux Falls, SD 57104  
Region: Comfort Products

[Back to top](#)

## Tennessee

### CE Bartlett - Memphis

901-388-4119  
1609 Bartlett Road  
Bartlett, TN 38134  
Region: South Central

### CE Chattanooga, TN

423-698-7755  
3000 South Hickory Street  
Chattanooga, TN 37404  
Region: Southeast

### CE Hickory Hill - Memphis

901-433-1900  
5191 Hickory Hill Road  
Hickory Hill, TN 38141  
Region: South Central

### CE Jackson

731-664-7225  
248 Commerce Center Circle Dr  
Jackson, TN 38301  
Region: South Central

### CE Kingsport, TN

423-279-0545  
10395 Wallace Alley Street  
Kingsport, TN 37663  
Region: Southeast

### CE Knoxville, TN

865-558-6336  
5900 Weisbrook Lane  
Knoxville, TN 37909  
Region: Southeast

### CE Nashville

615-365-3901  
915 Murfreesboro Road  
Nashville, TN 37217  
Region: Southeast

[Back to top](#)

## Texas

### CE Abilene

325-692-9133  
5402 North 1st Street  
Abilene, TX 79603  
Region: South Central

### CE Alamo Downs

210-377-3191  
6900 Alamo Downs  
Alamo Downs, TX 78238  
Region: South Central

### CE Beaumont

409-832-1500  
1925 I-10 East  
Beaumont, TX 77701  
Region: South Central

### CE Brownsville

956-831-8100  
3671 FM 802  
Brownsville, TX 78526  
Region: South Central

### CE Business Park Houston

713-856-5570  
7100 Business Park Dr  
Suite CHouston, TX 77041

### CE Carrollton

972-281-6665  
2000 Luna Rd  
Carrollton, TX 75006

Region: South Central

**CE College Station**

979-774-4833  
10450 State Hwy 30  
College Station, TX 77845  
Region: South Central

**CE Corpus Christi**

361-299-2400  
321 Junior Beck Dr.  
Corpus Christi, TX 78405  
Region: South Central

**CE Dallas**

972-283-0520  
5050 Investment Drive  
#106Dallas, TX 75236  
Region: South Central

**CE Garland**

214-461-8900  
3737 Grader Street  
Garland, TX 75041  
Region: South Central

**CE Haltom City**

817-838-4300  
2318 Pecan Court  
Haltom City, TX 76117  
Region: South Central

**CE Pasadena**

713-472-9300  
11511 South Sam Houston Parkway  
East  
Pasadena, TX 77089  
Region: South Central

**CE Pharr**

956-781-0091  
3000 N. Hibiscus  
Pharr, TX 78577  
Region: South Central

**CE San Antonio**

210-499-2200  
12625 Wetmore Rd  
Suite 418San Antonio, TX 78247  
Region: South Central

**CE Sugarland**

281-530-5014  
11727 S.Sam Houston Pkwy  
Sugarland, TX 77031  
Region: South Central

**CE Texarkana**

903-832-7975  
1019 N. Robison Road  
Texarkana, TX 75501  
Region: South Central

**CE Tyler**

903-534-1471  
2323 Broussard St  
Tyler, TX 75701  
Region: South Central

**CE Waco**

254-714-1280  
3234 Clay Avenue  
Waco, TX 76711  
Region: South Central

**CE Woodlands**

281-419-5249  
220 Spring Hill  
Woodland, TX 77386  
Region: South Central

[Back to top](#)

**Virginia**

**CE Alexandria, VA**

703-929-3533  
5230 Eisenhower Ave  
Bldg #3  
Alexandria, VA 22304  
Region: Mid-Atlantic

**CE Fredericksburg, VA**

540-710-2500  
212- C Industrial Ct.  
Fredericksburg, VA 22406  
Region: Mid-Atlantic

**CE Newport News, VA**

757-249-2605  
321 Ed Wright Ln.  
Newport News, VA 23606  
Region: Mid-Atlantic

**CE Norfolk, VA**

757-858-4500  
3501 Progress Rd  
Norfolk, VA 23502

**CE Richmond, VA**

804-355-0651  
2300 Westmoreland St  
Richmond, VA 23230

**CE Roanoke, VA**

540-343-8054  
3517 Aerial Way Dr  
Roanoke, VA 24018

Region: Mid-Atlantic

**CE Sterling, VA**

703-834-5200  
22675 Dulles Summit Court  
Suite 150  
Sterling, VA 20166  
Region: Mid-Atlantic

Region: Mid-Atlantic

**CE Winchester, VA**

540-723-9881  
255 Fort Collier Road  
Suite B  
Winchester, VA 22603  
Region: Mid-Atlantic

Region: Mid-Atlantic

[Back to top](#)

## West Virginia

**CE Scott Depot, WV**

304-722-8760  
4970 C Teays Valley Road  
Scott Depot, WV 25560  
Region: Mid-Atlantic

- [Sitemap](#)
- [Business Units](#)
- [About CE](#)
- [Career Opportunities](#)

# Annex 10



User Name:  Password:

**B to B Login:**

- Home
- About Us
- Products
- Goodies
- Capabilities
- Online Dealers
- Contact Us

- About Us
- Heritage
- Customer Service
- Sponsorships
- Environmental Policy
- Industry Affiliations
- News & Announcements
- Customer Projects

## Online Dealers



Techflex is happy to recommend this list of online dealers. They have proven records of Customer Service and provide access to a full range of Techflex products and accessories.

If you are selling Techflex sleeving on your site and would like to be included in this recommended vendors list, contact your Account Representative for details and requirements for listing.



### WireCare - Wire & Cable Management Superstore ▶

WireCare provides the online shopper access to the entire line of Techflex products in standard cut lengths as small as 5 feet. In addition, WireCare carries manufacturers lines of heat shrink tubing, tape, tie wraps, velcro cable straps and a full line of tools and accessories.



### Parts Express - Your Electronics Connection ▶

We know you have many choices when it comes to electronic parts suppliers these days. That is why all of us here at Parts Express are committed to making you happy. That's also why we try to offer more benefits than anyone else in the industry to you, the customer.



### CableOrganizer.com ▶

Cable jungles crop up everywhere... growing under the hoods of cars or aircraft, behind your computer or home entertainment unit, or snaking across the floor at industrial sites and convention halls. Welcome to CableOrganizer.com, where we stock wire management products for home and work -- the widest selection of cord covers on the web.



### Westlake Electronic Supply ▶

Westlake Electronic Supply stocks and has access to more than 150,000 items, including all types of electronic wire, cable, patchbays, connectors, adapters, A/V routers and edge products, and is the Northwest's leading supplier of electronic components for the Broadcast, Audio Video Telecommunication, RF and other markets.





**HAVE, Inc.** ▶

HAVE's Professional Products sales division specializes in Audio, Video, and Data Cable and Cable related products, including bulk cable, cable connectors, patch bays, panels, boxes, systems, snakes, and cable assemblies, from over 100 leading manufacturers.

**TuffStuff Direct** ▶

TuffStuffDirect is your comprehensive online resource for the complete line of Techflex packaged kits. We offer the full line of Double Yellow High Performance product kits, as well as the unique Case Mod kit line for computers and electronics. We also have the full line of kits for SCUBA hoses, along with specialized Techflex kits for fly fishing and bicyclists.



**Cable Ties and More** ▶

Your online destination for cable ties and related accessories. We offer a wide supplement of wall, floor and industrial cord covers, braided sleeving, durable heat shrink tubing, split wire loom, tools, and other cable protection systems and accessories that come in many styles, sizes and colors.



**Digi-Key** ▶

Digi-Key Corporation got its start in 1972 with the idea to package electronic parts in small quantities and market them to electronics enthusiasts. Today, Digi-Key is one of the fastest growing distributors of electronic components in the world. We continue to operate on the premise of providing our customers – you – with superior service, focusing on the key areas of product selection, product availability, on-time delivery, and responsiveness.



© 2010 Techflex, Inc.

Any unauthorized reproduction, in whole or part, in any medium whatsoever, without express written permission, is prohibited.

Techflex product names and logos are registered trademarks of Techflex, Inc., unless otherwise attributed. The contents and illustrations contained herein are believed to be reliable and accurate. Techflex makes no warranties as to their accuracy or completeness and disclaims any liability in conjunction with their use. Users should make their own evaluation as to the suitability of these products for their unique and specific applications.

Translate This Page



Select Language

Powered by **Google Translate**

[terms of use](#)



to  User Name:  Password:    
 Login:

- [Home](#)
- [About Us](#)
- [Products](#)
- [Goodies](#)
- [Capabilities](#)
- [Online Dealers](#)
- [Contact Us](#)

- [About Us](#)
- [Heritage](#)
- [Customer Service](#)
- [Sponsorships](#)
- [Environmental Policy](#)
- [Industry Affiliations](#)
- [News & Announcements](#)
- [Customer Projects](#)

### About Us



Since 1963, Techflex has been engineering and manufacturing a wide range of braided sleeving products for a variety of industries from biomedical and aerospace to wire, hose and cable bundling protection solutions for high performance automotive enthusiasts.

Our experience with this broad market, as well as our wide selection of general purpose and high-tech specialty products, has made Techflex the first name in sleeving solutions.

#### Mission Statement

We are committed to providing the most advanced products, the widest selections, the most knowledgeable customer service and the best value to our customers.



Customer requirements and global competitiveness are changing the way organizations around the world are doing business. Standardizing our practices into an organized and documented system provides a foundation for our comprehensive quality management programs. ISO 9001-2000 standards have helped us to better serve our customers while improving our quality systems and enabling us to be competitive in the global economy.

[Click here](#) to view certificate



© 2010 Techflex, Inc.  
 Any unauthorized reproduction, in whole or part, in any medium whatsoever, without express written permission, is prohibited.  
 Techflex product names and logos are registered trademarks of Techflex, Inc., unless otherwise attributed.  
 The contents and illustrations contained herein are believed to be reliable and accurate. Techflex makes no warranties as to their accuracy or completeness and disclaims any liability in conjunction with their use. Users should make their own evaluation as to the suitability of these products for their unique and specific applications.

#### Translate This Page

[terms of use](#)

# Annex 11



B to B User Name: Password:     
 Login:

- [Home](#)
- [About Us](#)
- [Products](#)
- [Goodies](#)
- [Capabilities](#)
- [Online Dealers](#)
- [Contact Us](#)

### About Us

- [About Us](#)
- [Heritage](#)
- [Customer Service](#)
- [Sponsorships](#)
- [Environmental Policy](#)
- [Industry Affiliations](#)
- [News & Announcements](#)
- [Customer Projects](#)



Since 1963, Techflex has been engineering and manufacturing a **wide range** of braided sleeving products for a variety of industries from biomedical and aerospace to wire, hose and cable bundling protection solutions for high performance automotive enthusiasts.

Our experience with this broad market, as well as our wide selection of general purpose and high-tech specialty products, has made Techflex the first name in sleeving solutions.



#### Mission Statement

We are committed to providing the most advanced products, the widest selections, the most knowledgeable customer service and the best value to our customers.



Customer requirements and global competitiveness are changing the way organizations around the world are doing business. Standardizing our practices into an organized and documented system provides a foundation for our comprehensive quality management programs. ISO 9001:2000 standards have helped us to better serve our customers while improving our quality systems and enabling us to be competitive in the global economy.

[Click here to view certificate](#)

© 2010 Techflex, Inc.  
 Any unauthorized reproduction, in whole or part, in any medium whatsoever, without express written permission, is prohibited.  
 Techflex product names and logos are registered trademarks of Techflex, Inc., unless otherwise attributed.  
 The contents and illustrations contained herein are believed to be reliable and accurate. Techflex makes no warranties as to their accuracy or completeness and disclaims any liability in conjunction with their use. Users should make their own evaluation as to the suitability of these products for their unique and specific applications.

#### Translate This Page

Powered by Google Translate

[terms of use](#)