

UNDERGROUND DUCT SPACERS



MONOBLOC



ELECTRICAL SYSTEMS

For fast, easy, economical installation
of underground duct banks

- Widest range of spacers available
- Quick, simple installations
- Lowest cost duct spacer system available

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We build tough products for tough environments®



IPEX
by aliaxis

MONOBLOC SPACERS

THE IDEAL SOLUTION for underground duct bank installation

- 29 strong, lightweight spacer configurations
- Re-bar holder slot simplifies installation of re-bar
- Concrete-saving base spacer – 4x3x3x3

The fast, easy, low-cost solution for underground electrical and telecommunications duct installations is now even better.

You can choose from 29 different configurations, so the right MONOBLOC spacer is available for virtually any duct installation job.

REVOLUTIONARY APPROACH

Unique base spacer saves concrete

You can lower both material and labour costs with the 4x3x3x3 MONOBLOC base spacer. By reducing concrete requirements one inch in duct bank encasements, this base spacer can save four cubic yards of concrete in a 500-foot long, 30-inch wide duct bank.

Re-bar innovation

Reinforcing re-bar slots have been incorporated into 12 of the 29 MONOBLOC spacers. These provide better alignment and more uniform distribution of re-bar in a duct bank, making duct bank installation even faster and easier.



APPLICATIONS

- UNDERGROUND DUCT BANKS
- MEDICAL CAMPUS
- UNIVERSITY CAMPUS

THE LOW-COST, HIGH-PERFORMANCE ANSWER

Developed by IPEX, a world leader in piping systems, MONOBLOC spacers are easier to handle, faster to install and cost significantly less than conventional vertical interlocking or concrete spacers. Because MONOBLOC spacers do not vertically interlock, the spacers can be offset from row to row, creating a more stable duct bank using fewer spacers.

In addition to the significant savings in material costs, labour costs are also dramatically reduced by eliminating assembly time needed for interlocking spacers. MONOBLOC spacers are supplied as one-piece units and are very simply installed.

MONOBLOC spacers are also 10 times lighter than concrete spacers which makes them easier to work with, reducing labour costs even more.

USE FEWER SPACERS

A typical duct bank installation can be completed with two-thirds fewer spacers using MONOBLOC. For example, only 300 one-piece MONOBLOC spacers are needed for a 500-foot long bank of four-inch duct, 4 wide by 3 high. A total of 1,200 spacers (base and intermediate) would be required for the same installation if interlocking spacers were used – a 60 per cent savings in material costs alone.



ADVANTAGES

THE RIGHT SOLUTION!

INNOVATIVE DESIGN

Twenty-six of the 29 different MONOBLOC spacers can be used interchangeably as either a base or intermediate unit.

Time-consuming calculations involved in determining base and intermediate requirements for interlocking spacers are eliminated. It becomes easy to ensure that the right number of spacers are available at the job site so that work proceeds smoothly.

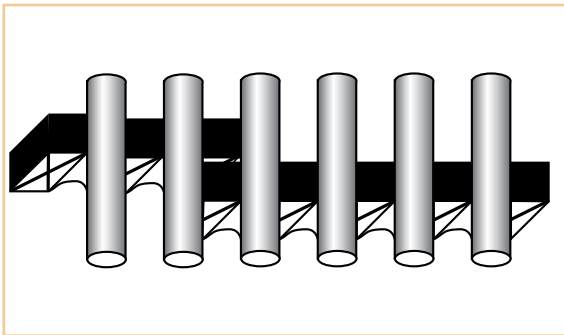
The ingenious design adapts to the inherent irregularities and contours of a trench with a wide support surface to ensure even load distribution.

Plus, because MONOBLOC spacers fit the duct pipe and not each other, there is no concern about possible conflicts between interlocking methods.

MAXIMUM FLEXIBILITY

Different sized MONOBLOC spacers can be easily grouped to create the required width of duct bank.

For example, two 2-way spacers can be used in combination to create one 4-way spacer. A 6-way duct bank can be created using one 2-way spacer and one 4-way spacer or two 3-way spacers.



A 6-way duct bank is created using one 2-way spacer and one 4-way spacer

TOUGH AND RESILIENT

Made of resilient, high-density polyethylene, MONOBLOC spacers easily withstand inclement weather and severe conditions normally found on a construction site. Losses caused by breakage are virtually eliminated. MONOBLOC spacers are resilient at extremely low temperatures. Tough and flexible, MONOBLOC spacers are immune to corrosion, rust, mildew and humidity.

SPECIFY MONOBLOC UNDERGROUND DUCT SPACERS

Lightweight, durable and easy-to-install. Choosing MONOBLOC over conventional spacers will significantly reduce the cost of your next underground electrical and telecommunications duct installation. Specify MONOBLOC!

POURING CONCRETE

Ensure the duct bank is stable and secure before pouring concrete. Secure by looping the entire duct bank with tie wire or by securing the ducts to the spacers and reinforcing bars, if used.

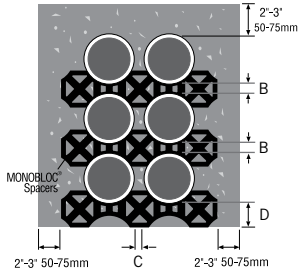
Avoid "harsh pours" of concrete directly on the duct bank assembly. Use a diverting mechanism during the pour to ensure the duct bank assembly is not disturbed.



PRODUCT CATALOGUE

MONOBLOC DUCT SPACERS

Benefits for Telephone Duct:



- lightweight; easy to handle and install
- weatherproof
- resilient at extremely low temperatures
- flexible, yet tough
- readily available in a wide range of sizes and configurations
- economical
- immune to corrosion attack
- approved by Bell Canada
- versatile, as they can be used as both a base & intermediate spacer

Selection Table (in inches)

Nominal Size (A)	Vertical Spacing (B)	Horizontal Spacing (C)	Ground Clearance (D)	Number of Ways (E)
2	1-1/2	1-1/2	3	2
3	1-1/2	1-1/2	3	2
3-1/2	1	1	2	2 - 3 - 4
4	1	1	2	1 - 2 - 3 - 4
4	1-1/2	1-1/2	3	2 - 3 - 4
4	2	2	3	1 - 2 - 3 - 4
4	3	3	3	2 - 3 - 4
4	3	3	4	2 - 3 - 4
4-1/2	2	2	3	1 - 2 - 3
5	1-1/2	2-1/8	3-5/8	1
5	1-1/2	1-1/2	3	2 - 3 - 4

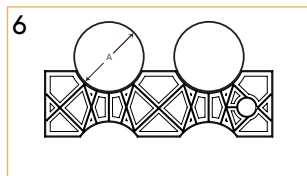
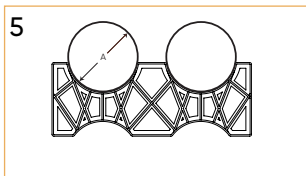
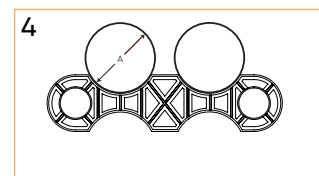
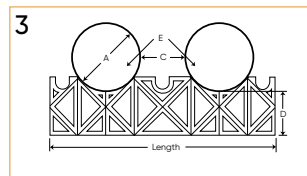
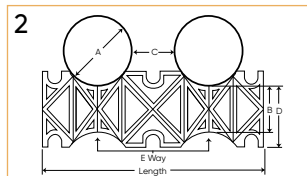
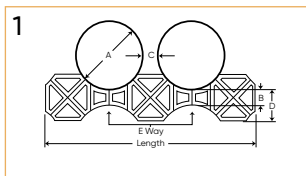
Monobloc Duct Spacers

Description (in) A, B, C, D	E	Product Code	Dimensional Drawing	Length (in)
2 x 1-1/2 x 1-1/2 x 3	2 way	029473	5	7.9
3 x 1-1/2 x 1-1/2 x 3	2 way	029474	5	10.3
3-1/2 x 1 x 1 x 2	2 way	029860	4	12.4
3-1/2 x 1 x 1 x 2	3 way	029861	4	17.3
3-1/2 x 1 x 1 x 2	4 way	029479	1	20.9
4 x 1 x 1 x 2	1 way	029475	1	8.3
4 x 1 x 1 x 2	2 way	029476	1	13.5
4 x 1 x 1 x 2	3 way	029477	1	18.8
4 x 1 x 1 x 2	4 way	029478	1	24.2
* 4 x 1-1/2 x 1-1/2 x 3	2 way	029470	2	14.2
* 4 x 1-1/2 x 1-1/2 x 3	3 way	029471	2	20.0
* 4 x 1-1/2 x 1-1/2 x 3	4 way	029472	2	26.0
* 4 x 2 x 2 x 3	1 way	029480	2	8.3
* 4 x 2 x 2 x 3	2 way	029464	2	14.5

* Spacers have provisions for re-bar. (re-bar slots)

Description (in) A, B, C, D	E	Product Code	Dimensional Drawing	Length (in)
* 4 x 2 x 2 x 3	3 way	029465	2	20.7
* 4 x 2 x 2 x 3	4 way	029499	2	27.0
* 4 x 3 x 3 x 3 (Base)	2 way	029466	3	15.0
* 4 x 3 x 3 x 3 (Base)	3 way	029488	3	22.5
* 4 x 3 x 3 x 3 (Base)	4 way	029489	3	30.0
* 4 x 3 x 3 x 4	2 way	029469	2	15.0
* 4 x 3 x 3 x 4	3 way	029497	2	22.5
* 4 x 3 x 3 x 4	4 way	029498	2	30.1
4-1/2 x 2 x 2 x 3	1 way	029485	6	8.7
4-1/2 x 2 x 2 x 3	2 way	029486	6	15.5
4-1/2 x 2 x 2 x 3	3 way	029487	6	22.2
5 x 1-1/2 x 1-1/2 x 3	2 way	029494	5	16.2
5 x 1-1/2 x 1-1/2 x 3	3 way	029495	5	23.1
5 x 1-1/2 x 1-1/2 x 3	4 way	029496	5	30.0

* Spacers have provisions for re-bar. (re-bar slots)



INSTALLATION

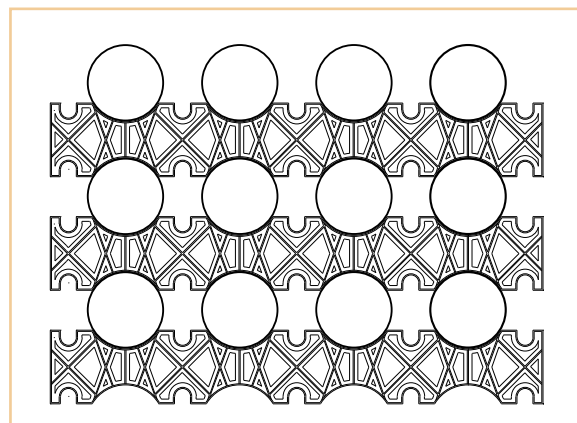
Calculating MONOBLOC Spacer requirements

To determine the type and quantity of MONOBLOC spacers required, you need to know:

- Duct size
- Minimum required spacing between the ducts in the duct bank as specified by the engineer or project manager
- Duct bank configuration
- Duct spacer spacing: IPEX recommends every five to seven feet, closer for larger duct banks and larger sizes of ducts
- Overall length of the duct bank

For example:

- 4-inch duct
- 2-inch spacing between ducts specified by engineer
- Duct bank configuration – 4 wide by 3 high
- Spacer Separation – 5 feet
- Length of duct bank – 500 feet



Determine the type of MONOBLOC spacer required

Based on this example, the MONOBLOC spacer required is:

4	x	2	x	2	x	3*	4-Way
Size of Duct (inches)	x	Vertical Spacing (inches)	x	Horizontal Spacing (inches)	x	Ground Clearance (inches)	Number of Ways

* Ground clearance is a characteristic of the specific spacer selected. Consult the MONOBLOC price list.

Calculating the number of MONOBLOC spacers required

1. Count the number of MONOBLOC spacer rows (Three-high in this example)
2. Multiply the number of rows by the overall length of the duct bank divided by the spacing separation distance
3. For example: $3 \times (500' / 5') = 300$ spacers (4x2x2x4)

3	x	500	/	5'
Number of Rows	x	Overall length of duct bank		Spacer separation

SALES AND CUSTOMER SERVICE

Customers call IPEX Electrical Inc.

Toll free: (866) 473-9462

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As leading suppliers of thermoplastic piping systems, the IPEX Group of Companies provides our customers with some of the largest and most comprehensive product lines. All IPEX products are backed by more than 50 years of experience. With state-of-the-art manufacturing facilities and distribution centers across North America, we have earned a reputation for product innovation, quality, end-user focus and performance.

Markets served by IPEX group products are:

- Electrical systems
- Telecommunications and utility piping systems
- PVC, CPVC, PP, PVDF, PE, ABS, and PEX pipe and fittings
- Industrial process piping systems
- Municipal pressure and gravity piping systems
- Plumbing and mechanical piping systems
- Electrofusion systems for gas and water
- Industrial, plumbing and electrical cements
- Irrigation systems

Product is manufactured by IPEX Electrical Inc.

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A policy of ongoing product improvement is maintained. This may result in modifications of features and/or specifications without notice.



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