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PURE PERFORMANCE

# PreFilters

# Multi-Pleat XL8 Mechanical MERV 8 Extended Surface Pleated Panel Filters

The Koch ***Multi-Pleat XL8*** is a medium efficiency extended surface pleated panel filter, engineered to provide higher initial efficiencies and overall superior performance than standard pleated filters.

The ***Multi-Pleat XL8*** carries a MERV 8 and MERV-A 8 performance rating in accordance with ASHRAE Test Standard 52.2-2007.

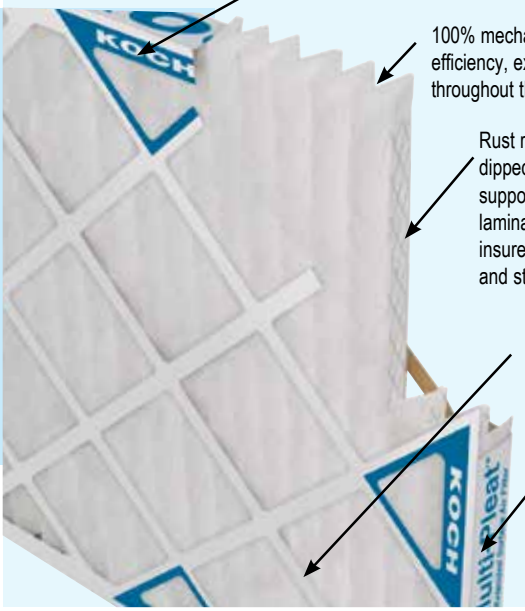
The MERV 8 and MERV-A 8 performance rating provided by the ***Multi-Pleat XL8*** make the filter an excellent upgrade from disposable filters and standard MERV 6 and 7 rated pleated filters. The ***Multi-Pleat XL8*** is the best selection in applications such as hospitals, laboratories, pharmaceutical plants, commercial office buildings, and in any system in which a higher degree of indoor air quality is required.

## Multi-Pleat XL8 Construction

The **Multi-Pleat XL8** media is produced with an optimal blend of highly specialized fibers, developed by Koch Filter Corporation specifically for use in extended surface air filters.

Developed to deliver a “one of a kind” performance, this specialized media operates on mechanical filtration principles which provide high efficiency, low pressure drop and high dust holding capacity.

The Koch Multi-Pleat XL8 maintains a MERV 8 performance rating before and after conditioning steps when tested in accordance to ASHRAE Test Standard 52.2-2007 and 52.2-2007 Appendix J.




## Two Media Area Capacity Levels

The **Multi-Pleat XL8** is an extremely versatile line of pleated panel filters which can be used in a wide variety of filtration systems worldwide. In order to meet the different requirements found in these applications, Koch offers the XL8 Series in two media area capacity levels.

**Standard Capacity**
Standard Capacity **XL8-SC** filters provide a combination of efficiency, economy, and excellent overall performance. Standard Capacity XL8 filters are an excellent choice in applications where filter change schedules are based on preventive maintenance schedules.

**High Capacity** - 30% more media
High Capacity **XL8-HC** filters are similar in construction to the Standard Capacity but have the added advantage of approximately 30% more media. The additional media results in extended filter life, making the XL8-HC the ideal filter for use in filtration systems where filter change schedules are predicated on recommended final pressure drop readings.

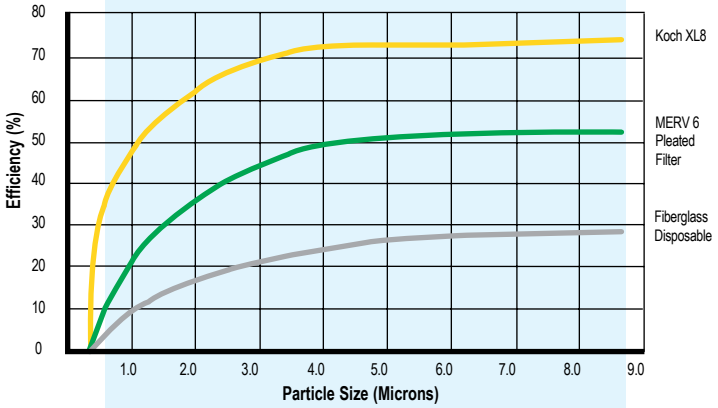
# Multi-Pleat XL 8 Technical Data

| Size (Nominal) | Size (Actual in inches) | | Capacity Low | Capacity Med | Capacity High | Standard Capacity XL8-SC Resistance Low | Resistance Med | Resistance High | Resistance Final | Media Area (Sq. Ft.) | High Capacity XL8-HC Resistance Low | Resistance Med | Resistance High | Resistance Final | Media Area (Sq. Ft.) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | (FPM) | 300 | 500 | 625 | 300 | 500 | 625 | 1.0" | | 300 | 500 | 625 | 1.0" | |
| 10x20x1 | 9½ x 19½ x ¾ | (CFM) | 425 | 700 | NR | 0.26 | 0.51 | NR | 1.0" | 2.3 | 0.21 | 0.41 | NR | 1.0" | 2.9 |
| 12x20x1 | 11½ x 19½ x ¾ | | 500 | 840 | NR | 0.26 | 0.51 | NR | 1.0" | 2.8 | 0.21 | 0.41 | NR | 1.0" | 3.5 |
| 12x24x1 | 11⅜ x 23⅜ x ¾ | | 600 | 1000 | NR | 0.26 | 0.51 | NR | 1.0" | 3.3 | 0.21 | 0.41 | NR | 1.0" | 4.2 |
| 14x20x1 | 13½ x 19½ x ¾ | | 590 | 980 | NR | 0.26 | 0.51 | NR | 1.0" | 3.3 | 0.21 | 0.41 | NR | 1.0" | 4.1 |
| 14x25x1 | 13½ x 24½ x ¾ | | 730 | 1215 | NR | 0.26 | 0.51 | NR | 1.0" | 4.1 | 0.21 | 0.41 | NR | 1.0" | 5.1 |
| 15x20x1 | 14½ x 19½ x ¾ | | 625 | 1050 | NR | 0.26 | 0.51 | NR | 1.0" | 3.5 | 0.21 | 0.41 | NR | 1.0" | 4.4 |
| 16x20x1 | 15½ x 19½ x ¾ | | 670 | 1115 | NR | 0.26 | 0.51 | NR | 1.0" | 3.8 | 0.21 | 0.41 | NR | 1.0" | 4.7 |
| 16x25x1 | 15½ x 24½ x ¾ | | 840 | 1400 | NR | 0.26 | 0.51 | NR | 1.0" | 4.7 | 0.21 | 0.41 | NR | 1.0" | 5.9 |
| 18x24x1 | 17⅜ x 23⅜ x ¾ | | 900 | 1500 | NR | 0.26 | 0.51 | NR | 1.0" | 5.1 | 0.21 | 0.41 | NR | 1.0" | 6.3 |
| 18x25x1 | 17½ x 24½ x ¾ | | 940 | 1570 | NR | 0.26 | 0.51 | NR | 1.0" | 5.3 | 0.21 | 0.41 | NR | 1.0" | 6.6 |
| 20x20x1 | 19½ x 19½ x ¾ | | 840 | 1400 | NR | 0.26 | 0.51 | NR | 1.0" | 4.8 | 0.21 | 0.41 | NR | 1.0" | 5.9 |
| 20x25x1 | 19½ x 24½ x ¾ | | 1050 | 1740 | NR | 0.26 | 0.51 | NR | 1.0" | 6.0 | 0.21 | 0.41 | NR | 1.0" | 7.4 |
| 24x24x1 | 23⅜ x 23⅜ x ¾ | | 1200 | 2000 | NR | 0.26 | 0.51 | NR | 1.0" | 6.8 | 0.21 | 0.41 | NR | 1.0" | 8.5 |
| 25x25x1 | 24½ x 24½ x ¾ | | 1310 | 2170 | NR | 0.26 | 0.51 | NR | 1.0" | 7.4 | 0.21 | 0.41 | NR | 1.0" | 9.3 |
| 10x20x2 | 9½ x 19½ x 1¾ | (CFM) | 425 | 700 | 875 | 0.14 | 0.25 | 0.34 | 1.0" | 4.0 | 0.09 | 0.18 | 0.25 | 1.0" | 6.0 |
| 12x20x2 | 11½ x 19½ x 1¾ | | 500 | 840 | 1050 | 0.14 | 0.25 | 0.34 | 1.0" | 4.8 | 0.09 | 0.18 | 0.25 | 1.0" | 7.2 |
| 12x24x2 | 11⅜ x 23⅜ x 1¾ | | 600 | 1000 | 1250 | 0.14 | 0.25 | 0.34 | 1.0" | 5.7 | 0.09 | 0.18 | 0.25 | 1.0" | 8.6 |
| 14x20x2 | 13½ x 19½ x 1¾ | | 590 | 980 | 1215 | 0.14 | 0.25 | 0.34 | 1.0" | 5.6 | 0.09 | 0.18 | 0.25 | 1.0" | 8.4 |
| 14x25x2 | 13½ x 24½ x 1¾ | | 730 | 1215 | 1520 | 0.14 | 0.25 | 0.34 | 1.0" | 7.1 | 0.09 | 0.18 | 0.25 | 1.0" | 10.6 |
| 15x20x2 | 14½ x 19½ x 1¾ | | 625 | 1050 | 1310 | 0.14 | 0.25 | 0.34 | 1.0" | 6.1 | 0.09 | 0.18 | 0.25 | 1.0" | 9.1 |
| 16x20x2 | 15½ x 19½ x 1¾ | | 670 | 1115 | 1400 | 0.14 | 0.25 | 0.34 | 1.0" | 6.7 | 0.09 | 0.18 | 0.25 | 1.0" | 9.9 |
| 16x24x2 | 15½ x 23½ x 1¾ | | 800 | 1350 | 1675 | 0.14 | 0.25 | 0.34 | 1.0" | 7.8 | 0.09 | 0.18 | 0.25 | 1.0" | 11.6 |
| 16x25x2 | 15½ x 24½ x 1¾ | | 840 | 1400 | 1740 | 0.14 | 0.25 | 0.34 | 1.0" | 8.1 | 0.09 | 0.18 | 0.25 | 1.0" | 12.1 |
| 18x20x2 | 17½ x 19½ x 1¾ | | 750 | 1250 | 1570 | 0.14 | 0.25 | 0.34 | 1.0" | 7.3 | 0.09 | 0.18 | 0.25 | 1.0" | 10.9 |
| 18x24x2 | 17½ x 23½ x 1¾ | | 900 | 1500 | 1875 | 0.14 | 0.25 | 0.34 | 1.0" | 8.8 | 0.09 | 0.18 | 0.25 | 1.0" | 13.1 |
| 18x25x2 | 17½ x 24½ x 1¾ | | 950 | 1570 | 1960 | 0.14 | 0.25 | 0.34 | 1.0" | 9.1 | 0.09 | 0.18 | 0.25 | 1.0" | 13.7 |
| 20x20x2 | 19½ x 19½ x 1¾ | | 840 | 1400 | 1740 | 0.14 | 0.25 | 0.34 | 1.0" | 8.3 | 0.09 | 0.18 | 0.25 | 1.0" | 12.4 |
| 20x24x2 | 19½ x 23½ x 1¾ | | 1000 | 1675 | 2100 | 0.14 | 0.25 | 0.34 | 1.0" | 9.8 | 0.09 | 0.18 | 0.25 | 1.0" | 14.6 |
| 20x25x2 | 19½ x 24½ x 1¾ | | 1050 | 1740 | 2170 | 0.14 | 0.25 | 0.34 | 1.0" | 10.5 | 0.09 | 0.18 | 0.25 | 1.0" | 15.5 |
| 24x24x2 | 23⅜ x 23⅜ x 1¾ | | 1200 | 2000 | 2500 | 0.14 | 0.25 | 0.34 | 1.0" | 11.8 | 0.09 | 0.18 | 0.25 | 1.0" | 17.9 |
| 25x25x2 | 24½ x 24½ x 1¾ | | 1310 | 2170 | 2720 | 0.14 | 0.25 | 0.34 | 1.0" | 12.8 | 0.09 | 0.18 | 0.25 | 1.0" | 19.1 |
| 12x24x4 | 11⅜ x 23⅜ x 3¾ | (CFM) | 600 | 1000 | 1250 | 0.09 | 0.18 | 0.25 | 1.0" | 10.6 | 0.08 | 0.16 | 0.23 | 1.0" | 12.9 |
| 16x20x4 | 15½ x 19½ x 3¾ | | 670 | 1115 | 1400 | 0.09 | 0.18 | 0.25 | 1.0" | 12.0 | 0.08 | 0.16 | 0.23 | 1.0" | 14.7 |
| 16x24x4 | 15⅜ x 23⅜ x 3¾ | | 800 | 1350 | 1675 | 0.09 | 0.18 | 0.25 | 1.0" | 14.3 | 0.08 | 0.16 | 0.23 | 1.0" | 17.5 |
| 16x25x4 | 15½ x 24½ x 3¾ | | 840 | 1400 | 1750 | 0.09 | 0.18 | 0.25 | 1.0" | 15.0 | 0.08 | 0.16 | 0.23 | 1.0" | 18.4 |
| 18x24x4 | 17½ x 23⅜ x 3¾ | | 900 | 1500 | 1875 | 0.09 | 0.18 | 0.25 | 1.0" | 16.3 | 0.08 | 0.16 | 0.23 | 1.0" | 19.9 |
| 20x20x4 | 19½ x 19½ x 3¾ | | 840 | 1400 | 1740 | 0.09 | 0.18 | 0.25 | 1.0" | 15.1 | 0.08 | 0.16 | 0.23 | 1.0" | 18.4 |
| 20x24x4 | 19½ x 23⅜ x 3¾ | | 1000 | 1675 | 2100 | 0.09 | 0.18 | 0.25 | 1.0" | 18.1 | 0.08 | 0.16 | 0.23 | 1.0" | 22.2 |
| 20x25x4 | 19½ x 24½ x 3¾ | | 1050 | 1740 | 2170 | 0.09 | 0.18 | 0.25 | 1.0" | 19.5 | 0.08 | 0.16 | 0.23 | 1.0" | 23.6 |
| 24x24x4 | 23⅜ x 23⅜ x 3¾ | | 1200 | 2000 | 2500 | 0.09 | 0.18 | 0.25 | 1.0" | 22.5 | 0.08 | 0.16 | 0.23 | 1.0" | 27.5 |
| 24x24x6 | 23⅜ x 23⅜ x 5¾ | (CFM) | 1200 | 2000 | 2500 | 0.13 | 0.19 | 0.29 | 1.0" | 33.3 | 0.11 | 0.17 | 0.28 | 1.0" | 40.7 |

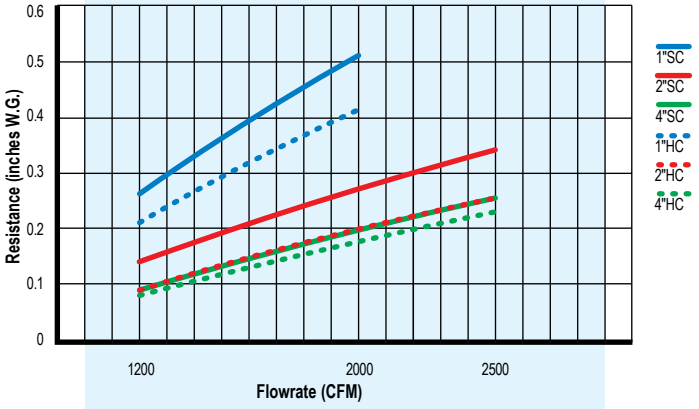
**Additional Multi-Pleat XL8 Product Information**

MERV (Minimum Efficiency Reporting Value) • Recommended Final Pressure Drop is 1.0" w.g. • Performance data is based on ASHRAE Test Standards 52.1-1999 and 52.2-2007. Recommended maximum continuous operational temperature is 200°F. • Multi-Pleat XL8 filters are classified as Underwriter's Laboratories Class 2 according to U.L. Standard 900.

## Efficiency by Particle Size




## Initial Resistance vs. Filter Face Velocity




# Commercial & Industrial Disposable Panel Filters

**Koch Commercial & Industrial Disposable Panels** are economical air filters designed for light-to-medium duty air filtration applications.

***Koch C&I Disposables are constructed for high performance and durability:***

**Fiberglass Media –** Standard C&I Disposables are constructed with high grade progressively dense glass fibers. The air entry side is composed of open coarse fibers, while the air exit side is made up of tighter fibers. This dual density media configuration allows for proper depth loading and full utilization of the filter media. Each fiber is coated with a non-migrating adhesive to enhance filter performance.

**Polyester Media –** C&I Disposables are also available with polyester filter media, a dual-layered high performance media for applications where synthetic filter media is specified.

**Sturdy One-Piece Frame –** The Koch C&I Disposable utilizes a one-piece moisture-resistant craft board frame for strength and ease of installation. The interlocking miter corner of the Koch C&I filter provides extra strength and durability. No extra metal support is needed making the filter more environmentally friendly.

**Specialized Sealant –** A thermoplastic sealant is used to bond the filter media to the frame on both the upstream and downstream sides of the filter. This bond eliminates any air bypass and helps provide rigidity to the filter.

## Commercial & Industrial Disposable Panel Filter Technical Data

| Size | Initial Resistance @ 300 FPM (in. w.g.) Fiberglass | Polyester | Carton Quantity |
|---|---|---|---|
| 8 x 16 x 1 | .07 | .15 | 12 |
| 10 x 10 x 1 | .07 | .15 | 12 |
| 10 x 20 x 1 | .07 | .15 | 12 |
| 12 x 20 x 1 | .07 | .15 | 12 |
| 12 x 24 x 1 | .07 | .15 | 12 |
| 12 x 25 x 1 | .07 | .15 | 12 |
| 14 x 20 x 1 | .07 | .15 | 12 |
| 14 x 25 x 1 | .07 | .15 | 12 |
| 15 x 20 x 1 | .07 | .15 | 12 |
| 16 x 16 x 1 | .07 | .15 | 12 |
| 16 x 20 x 1 | .07 | .15 | 12 |
| 16 x 22¼ x 1 | .07 | .15 | 12 |
| 16 x 25 x 1 | .07 | .15 | 12 |
| 18 x 24 x 1 | .07 | .15 | 12 |
| 18 x 25 x 1 | .07 | .15 | 12 |
| 20 x 20 x 1 | .07 | .15 | 12 |
| 20 x 24 x 1 | .07 | .15 | 12 |
| 20 x 25 x 1 | .07 | .15 | 12 |
| 22 x 22 x 1 | .07 | .15 | 12 |
| 24 x 24 x 1 | .07 | .15 | 12 |
| 25 x 25 x 1 | .07 | .15 | 12 |

| Size | Initial Resistance @ 300 FPM (in. w.g.) Fiberglass | Polyester | Carton Quantity |
|---|---|---|---|
| 12 x 24 x 2 | .09 | .19 | 12 |
| 14 x 20 x 2 | .09 | .19 | 12 |
| 14 x 25 x 2 | .09 | .19 | 12 |
| 15 x 20 x 2 | .09 | .19 | 12 |
| 16 x 20 x 2 | .09 | .19 | 12 |
| 16 x 24 x 2 | .09 | .19 | 12 |
| 16 x 25 x 2 | .09 | .19 | 12 |
| 18 x 24 x 2 | .09 | .19 | 12 |
| 18 x 25 x 2 | .09 | .19 | 12 |
| 20 x 20 x 2 | .09 | .19 | 12 |
| 20 x 24 x 2 | .09 | .19 | 12 |
| 20 x 25 x 2 | .09 | .19 | 12 |
| 24 x 24 x 2 | .09 | .19 | 12 |
| 25 x 25 x 2 | .09 | .19 | 12 |

**Average Arrestance:**
Fiberglass - 1" - 65-70%, 2" - 70-75%
Polyester - 1" - 75-80%, 2" - 80-85%

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