



Setting the standard for clean diesel.

Our line of large frontal area (LFA) substrates delivers reliable performance under the demanding conditions of day-to-day diesel operation. With a selection of back pressure and geometric surface area combinations, our advanced substrates enhance system performance.

Product Information

Discover Advanced Solutions with Corning® Celcor® LFA Substrates

- Best-in-class technical expertise from the company that pioneered cellular ceramic solutions and set the standard for clean diesel worldwide
- Range of products to address tightening global standards

Product Highlights

- Provides flexibility to systems requiring more surface area in the same volume, or lower pressure drop with the same surface area
- Resistant to extreme temperature gradients
- Excellent thermal shock performance due to low coefficient of thermal expansion
- Precision control of porosity for proper application and adhesion of washcoat
- Able to withstand packaging loads and subsequent exposure in vehicles to vibration, load shock, and temperature changes
- Thin walls enable reduced pressure drop

Global Heavy-Duty Supply

Supporting heavy-duty diesel manufacturers worldwide



Applications

For heavy-duty on-road and non-road diesel applications, such as trucks, buses, construction and agricultural equipment, and stationary applications

Product Attributes

Thin-wall Products [cpsi/web]	Bulk Density [g/L]	Open Frontal Area [%]	Geometric Surface Area [cm²/cm³]	Volumetric Heat Capacity 200° C [J K ⁻¹ L ⁻¹]	Hydraulic Diameter [mm]	Isostatic Strength [bar]
300/5	294	81.9	24.7	175	1.33	>10
400/4	279	82.8	28.7	166	1.16	>10
600/3	267	83.6	35.3	159	0.95	>10

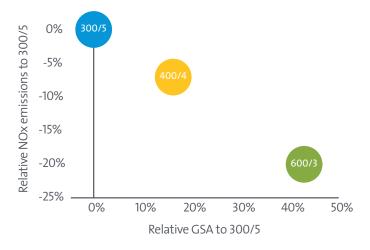
Corning® Celcor® LFA Substrates



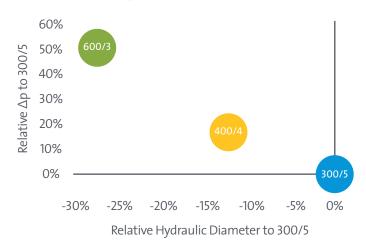




Modeled NOx Emissions / Geometric Surface Area



Pressure Drop / Hydraulic Diameter



Notes

- Thin-wall technology enables significantly lower pressure drop
- Higher cell densities offer increased geometric surface area, which drives emissions performance
 - 600/3 has the highest geometric surface area, which enables the best steady-state performance
 - 400/4 provides a good trade-off between emissions performance and pressure drop
 - 300/5 can help meet the requirements of pressure drop limited applications

Standard Sizes

Up to 13 inches in diameter

CORNING

Contact us today to learn how Corning's extensive portfolio of advanced ceramic solutions can help you meet your most demanding emissions control needs.

Environmental@corning.com www.corning.com/EnvironmentalTechnologies

The charts and graphs used in this publication are based on data from experimental and limited tests conducted under controlled laboratory conditions and modelling sponsored by Corning. Corning can provide additional calculations or test results based on specific operating conditions.

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