

CORNING



# Corning® FLORA™ Substrates

## Product Information

### Benefits

Corning builds on more than 40 years of ceramic material and process knowledge with its fast light-off substrates. Through a unique material design that significantly reduces mass, FLORA™ substrates can reach operating temperature more quickly than our standard Celcor® substrates to lower cold-start emissions. Discover best-in-class technical expertise from the company that invented cellular ceramic substrates and sets the standard for catalytic converters worldwide.

- Excellent time to light-off performance to meet stringent HC emissions requirements
- Designed to facilitate on-wall coating to help maximize catalytic performance
- Can lower system cost by reducing precious metal use
- Improves fuel efficiency

### Applications

- Close-coupled for light-duty gasoline
- DOC and LNT for light-duty diesel

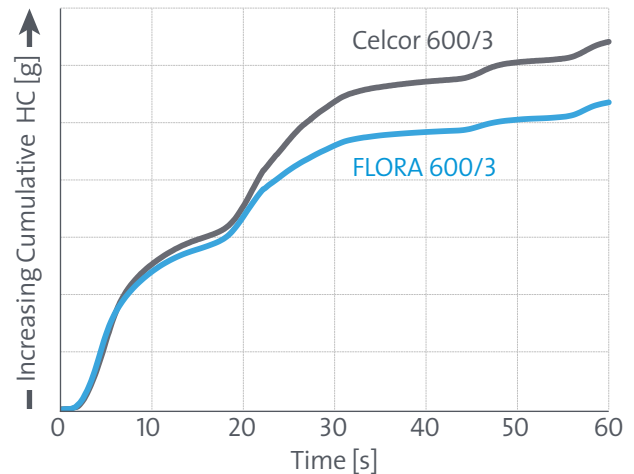
### Product Attributes

Product [cpsi/web]	Open Frontal Area [%]	Back Pressure <sup>1</sup> [kPa]	Time to light-off <sup>2</sup> [s]
Celcor 600/3	83.6	2.0	55.5
FLORA 600/3	83.6	2.0	42.4
Celcor 750/2	86.8	2.4	55.3
FLORA 750/2	86.8	2.4	39.4
Celcor 600/2	88.1	1.8	51.5
FLORA 600/2	88.1	1.8	36.7

<sup>1</sup>Calculated on bare 188.41 x 73 mm part at 200 kg/hr ~ 800°C

<sup>2</sup>Calculated on bare 188.41 x 73 mm part

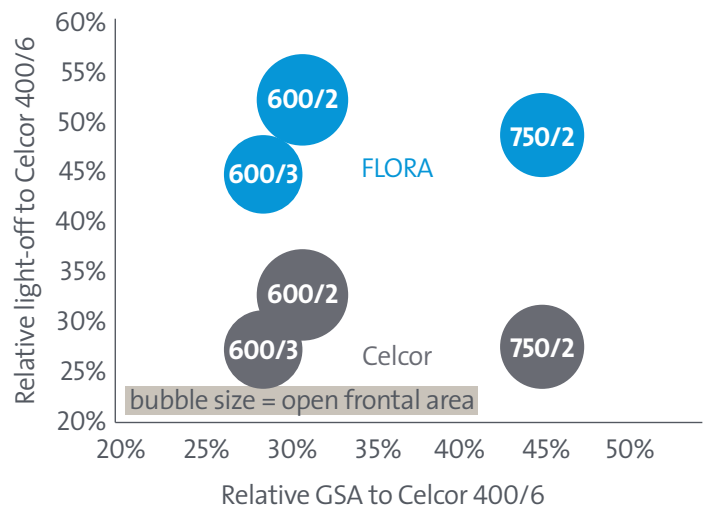
### Cumulative HC Emissions



Engine bench testing on substrate in close-coupled position with production coating

Fast light-off substrates significantly reduce cumulative hydrocarbon emissions compared to standard substrates.

### Geometric Surface Area / Light-off

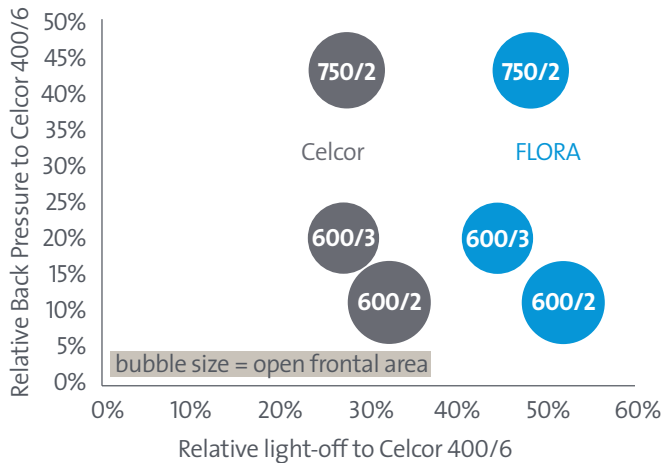


Based on 0.8 L substrate volume

Parts tested at size 118.41 x 73 mm

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## Back Pressure/ Light-off



Based on 0.8 L substrate volume  
Parts tested at size 118.41 x 73 mm  
bp at 200 kg/hr ~ 800°C

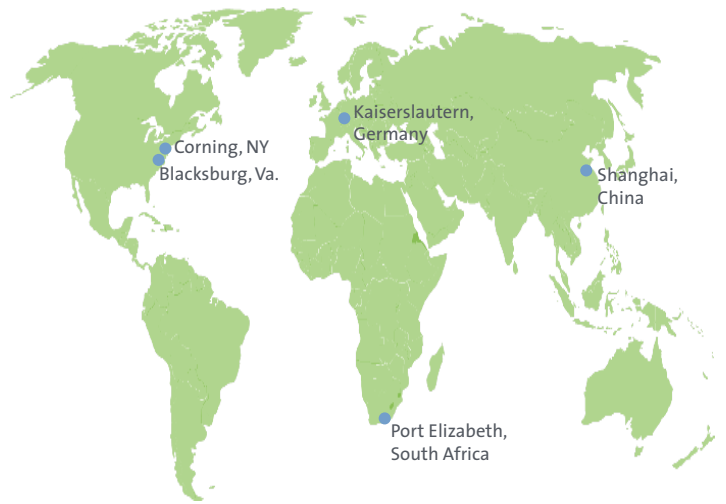
## Discover Advanced Solutions with Corning Substrates

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

[Environmental@corning.com](mailto:Environmental@corning.com)

[www.corning.com/EnvironmentalTechnologies](http://www.corning.com/EnvironmentalTechnologies)

## Environmental Technologies Global Locations



## CORNING

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

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