

# DREMEL DIGILAB

## LASER CUTTER

### Exhaust Management Systems

During operation, laser cutters generate exhaust that may be hazardous to health. Always operate the Dremel LC40 Laser Cutter with proper exhaust ventilation and/or filtration, and always operate in a well-ventilated area. Consult with federal, state and/or local authorities and applicable homeowner or condominium associations to ensure compliance of ventilation and exhaust systems. The installer of the exhaust management system is responsible for complying with all codes, regulations and laws, including those for hazardous or noxious exhaust ventilation systems.

There are five options for managing the exhaust generated during the laser fabrication process. Consult the table below to determine an appropriate exhaust management method based the intended operating location of the Laser Cutter, the size of room where it will be operated, and the intended frequency and duration of laser fabrication. Methods A, B, and E involve discharging the exhaust outdoors, while Methods C and D use an air filtration system that can be used indoors with the laser cutter.

When venting the exhaust outdoors (methods A, B, and E), choose an exhaust location where it will not cause a public nuisance, and not less than the following distances: 10 feet from property lines; 10 feet from operable openings into buildings (e.g. windows, doors, air intakes); 3 feet from exterior walls and roofs; 10 feet above adjoining grade. The onboard fan (method A) may only be used if less than 10 feet of duct is used between the laser cutter and the outdoor exhaust location. If more than 10 feet of duct will be needed, use the external booster fan (method B).

EXHAUST MANAGEMENT METHOD	DREMEL DIGILAB MODEL TO PURCHASE	MAXIMUM LASER FABRICATION TIME IN HOURS/DAY (HR/D) & HOURS/WEEK (HR/W)					
		Home/Residential		Office/Commercial			Classroom
		Room Size 30-450 sq ft*	Room Size > 450 sq ft*	Room Size 50-450 sq ft*	Room Size 450-650 sq ft*	Room Size > 650 sq ft*	Room Size > 500 sq ft*
A	Onboard Fan	✗	2 hours/day 5 hours/week	✗	2 hours/day 8 hours/week	2 hours/day 11 hours/week	✓
B	External Booster Fan	✓	✓	✓	✓	✓	✓
C	Light Duty Filtration Unit	✗	✓	✗	2 hours/day 14 hours/week	✓	✓
D	Heavy Duty Filtration Unit	🕒	🕒	🕒	🕒	✓	✓
E	Commercial/Industrial Mechanical Exhaust System	N/A	N/A	✓	✓	✓	✓

✓ OK up to 3.75 hours/day, 18 hours/week of laser fabrication time. For additional details contact Dremel customer service.

✗ Do not use for Dremel LC40 Laser Cutter.

⌚ Consult filtration unit manufacturer.

N/A Exhaust management method not applicable for this use location.

\* Room size is based on ceiling height of 8.5 feet. Adjust room size for actual ceiling height. Do not use Dremel LC40 Laser Cutter in rooms smaller than specified in table.

LC40-03



LC40-01 & LCFS-01

