

Proposed Standard:

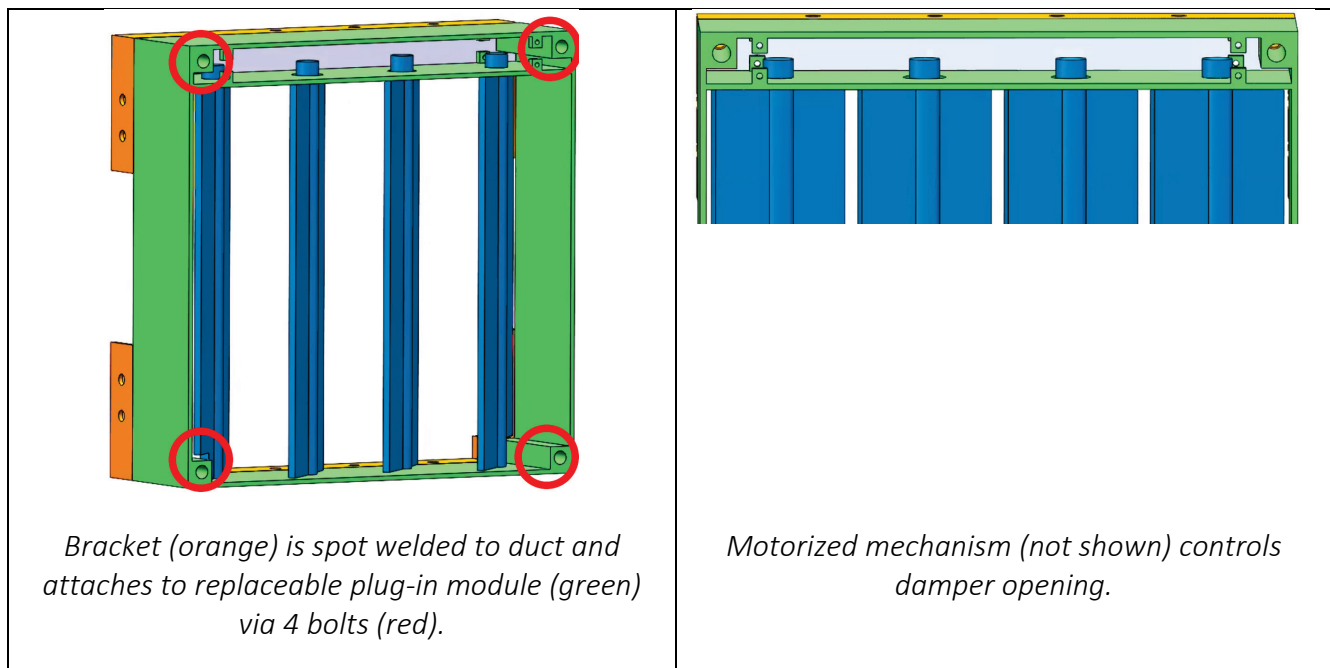
Replaceable Damper Module

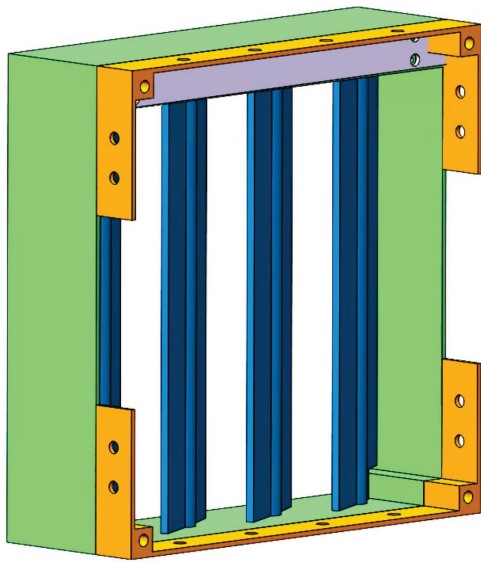
By Glenn Weinreb, Director, Manhattan 2 Project, March 3, 2022

This document suggests a mechanical standard that defines how replaceable plug-in dampers could potentially be installed in ducts, as illustrated below. This document and this design is free and open, which means anyone can modify and use at no charge.

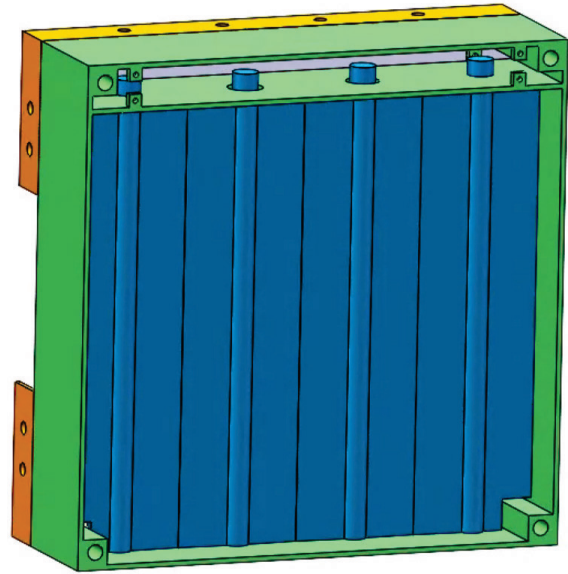
This module is installed near a vent opening, and is therefore accessible for service and replacement. This is designed to connect to a building plug-and-play. For details, see:

- [Standards are Needed to Fully Control Air in Buildings](#), Power Electronics, Mar 2022
- Manhattan 2 [Fan/Damper R&D Initiative](#)





System minimizes obstruction of airflow when fully open. HVAC designer places this near vent, to allow access during replacement.



Designers propose these be made in standard sizes, to support replacement by multiple manufacturers over building lifetime.

For more details, see:

- [Standards are Needed to Fully Control Air in Buildings](#), Power Electronics, Mar 2022
- Manhattan 2 [Fan/Damper R&D Initiative](#)
- [Standards are needed to Thermally Cover Windows](#), Power Electronics, Nov 2021
- Manhattan 2 [Window Thermal Cover R&D Initiative](#)
- [Using processors and software to make buildings smarter](#), EDN, Mar 2021
- Manhattan 2 [Smart Building R&D Initiative](#)