

# Product Specification

## **LOADTECH® 12" DEPTH BOX HIGH CAPACITY EXTENDED SURFACE EMBOSSED PLEAT FILTERS**

### **1.0 Scope**

This specification covers extended surface, embossed pleat filters that are a component of heating, ventilating and air conditioning systems.

### **2.0 Construction**

The filters consist of an embossed pleated synthetic media pack contained in cell sides made of high impact plastic.

#### **2.1 Media**

The media shall be made of a continuous sheet of gold tinted, 100% synthetic fiber. The media shall be of two-layer gradient density fiber with an embossed pattern.

The media shall be water resistant. Humidity or exposure to sensible moisture shall not affect performance other than a temporary rise in resistance.

The media shall be durable and resistant to tearing or abrasion.

#### **2.2 Embossed Media Pack**

The media shall be molded into a series of preformed channels that shall form the pleats. Beads of adhesive shall be applied to the media, bonding the pleats into a rigid, pack.

#### **2.3 Filter Frame**

The cell sides shall be made of a high strength, high impact polystyrene plastic. The frame shall be moisture, chemical and corrosion resistant. The frame shall mechanically lock together at each corner.

#### **2.4 Frame Adhesive**

The media back shall be sealed into the cell sides by foamed hot-melt adhesive, preventing bypass between the pack and the frame.



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## 2.5 Media Area

The filters shall contain a minimum amount of media per the following schedule:

24x24x12	122 ft <sup>2</sup>
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## 3.0 Performance

The filters shall meet the following minimum performance requirements per ASHRAE Standard 52.2-2017. Tests conducted at 492 FPM face velocity on 24x24 size filters shall be representative of the performance of all sizes manufactured.

Model	PLT12-M14-04-NH
Nominal Size	24 x 24 x 12
Rated Air Flow Capacity	2000 CFM
Initial Resistance @ 500 FPM	0.29" W.G.
Final Resistance	1.50" W.G.
MERV	14

## 4.0 Underwriters Laboratories Classification

The filters shall be classified per UL Standard 900 for flammability.

## 5.0 Incinerable

The filters shall be incinerable. No metal components are acceptable.

## 6.0 Operating Temperature Limits

The filter shall operate at temperatures up to 170 °F (76 °C) without materially affecting filter integrity or performance.

