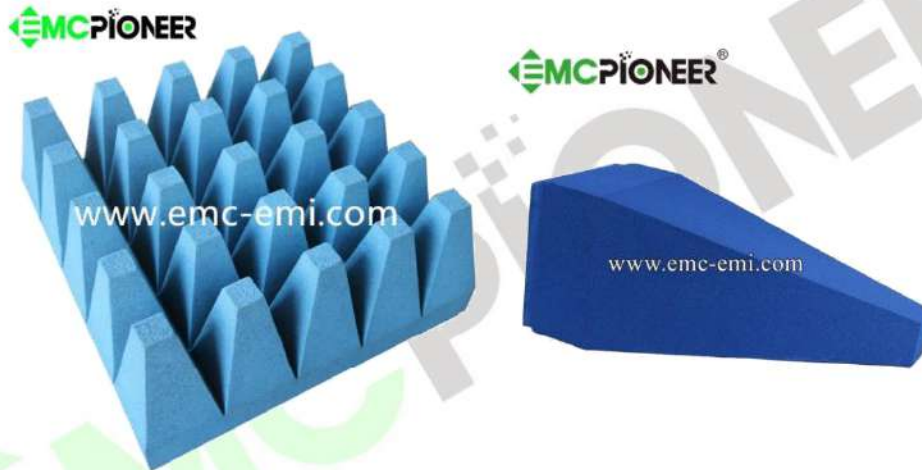


# Truncated Pyramid Absorber

## Description:

Truncated Pyramid microwave absorber (PE-TR series) is made of high quality, high density polyurethane foam with technology of molding, dipping, drying and surface treatment, good performance, wide range application.



## Standard Model

- Standard model: PE-TR-220, 440, 550.
- PE-TR-550 type is used for military EMC chamber, meet MIL-STD-461E and GJB152A.

## Physical

Model Name	Base Size F(mm)	Number of Pyramidal	Weight (Kg/m <sup>2</sup> )	Total Height A(mm)	Base Height D(mm)	Pyramidal Height C(mm)	Pyramidal Width B(mm)
PE-TR-220	500*500	5*5	7	220	60	160	100
PE-TR-440	500*500	3*3	10	440	80	360	167
PE-TR-550	500*250	1*2	14	550	100	450	250

## Property:

### Electrical property

Small medium parameter polyurethane foam, small surface reflection, body absorb, enough attenuation inside, optimized treatment.

### Flame retardancy

- NRL report 8093 I, II, III, meet standard of GB8624-B2, DIN4102-B2, ISO11925-2, UL94.
- Oxygen index:  $\geq 28\%$
- Working temperature:  $-50^{\circ}\text{C} \sim +80^{\circ}\text{C}$  or  $-85^{\circ}\text{F} \sim 176^{\circ}\text{F}$ , can up to  $100^{\circ}\text{C}$  in short time.
- Power capacity:  $1\text{KW}/\text{m}^2$ , can up to  $1.5\text{KW}/\text{m}^2$  in short time.

### Environmental protection property

- Control from the source: inorganic material, avirulent insipidity, no harmful gas release.
- Meet RoHS standard.
- Products without halogen.
- Formaldehyde emission of products meets GB18580-2001 E1 standard.
- Air quality in chamber room meets GB/T18883-2002 standard.

### Physical property

- Even dipping, absorbing composition firmly attached.
- Appearance color evenly, customized color acceptable.
- High specification consistency, beautiful appearance, no hang down apex.
- Soft, high anti-mechanical extrusion characteristics, can rebound.

## Specification:

Model Name	Thickness (mm)	Vertical Incidence Maximum Reflectivity $R_w(-\text{dB})$ under Frequency (GHz)								
		40	15	10	3	1.0	0.5	0.3	0.2	0.1
PE-TR-220	220	50	50	50	40	33	20			
PE-TR-440	440	50	50	50	45	40	30	20	17	
PE-TR-550	550	50	50	50	50	43	35	30	20	17

## Compare with PE-PY type:

1. PE-TR type is made from PE-PY type, it is cut 20% height from the top of PE-PY type.
2. PE-TR type save space, better anti-mechanical extrusion characteristics.
3. PE-TR type is suitable for easily damaged parts in microwave anechoic chamber, such as door, aisle and operating parts, spare space microwave anechoic chamber, and small microwave anechoic chamber.
4. PE-TR type with better performance in low frequency, worse performance in high frequency than PE-PY type.

## Application:

1. Microwave anechoic chamber, absorbing screen, microwave anechoic box etc.
2. Materials with different types, heights and structures according to the shape of microwave anechoic chamber, performance request and using parts.
3. Performance optimization of frequency division as per customers' request.

## Installation:

The installation is usually pasted with glue.

1. First, draw the mesh according to the base size of absorbing material.
2. Second, brush the glue on the substrate, wait for a moment until it has a certain viscosity.
3. Then, brush the glue at the bottom of the PE-TR absorbing material, wait for a moment until it has a certain viscosity.
4. Finally, press the PE-TR absorbing material onto the substrate.