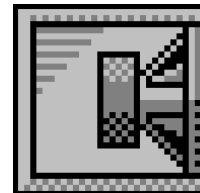


# Custom Vented Box Design

By karsten, cad



## Box Properties

--Description--

Name: 1x18 comparison

Type: Vented Box

Shape: Prism, square

--Box Parameters--

Vb = 148,8 liters

V(total) = 174,3 liters

Fb = 46, Hz

F3 = 50,32 Hz

Fill = minimal

--Vents--

No. of Vents = 1

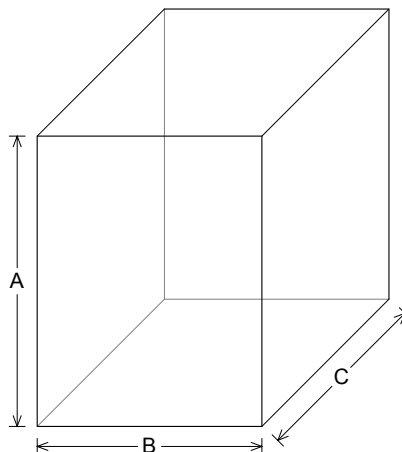
Vent shape = rectangle

Vent ends = one flush

Hv = 140, mm

Wv = 430, mm

Lv = 387,9 mm



--External Dimensions--

A = 706, mm

B = 546, mm

C = 583, mm

--Internal Dimensions--

A = 670, mm

B = 510, mm

C = 510, mm

--Wall Thickness--

Front = 55, mm

Side = 18, mm

## Driver Properties

--Description--

Name: PS18 400

Type: Standard one-way driver

Company: Eminence Speaker Corp.

Piston: Paper cone

Suspension: Plasticised cloth (linen)

Dust Cap: Paper

Frame: Cast aluminum

Voice Coil: 76.2 mm, copper on Kapton former

Magnet: Ferrite, 95 oz

--Configuration--

**No. of Drivers = 1**

--Driver Parameters--

Fs = 34,5 Hz

Qms = 7,32

Vas = 374,7 liters

Xmax = 4,5 mm

Sd = 1140 sq.cm

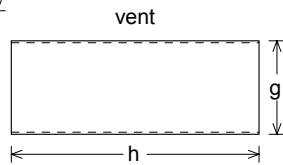
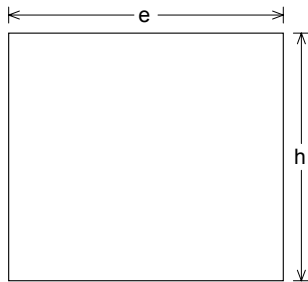
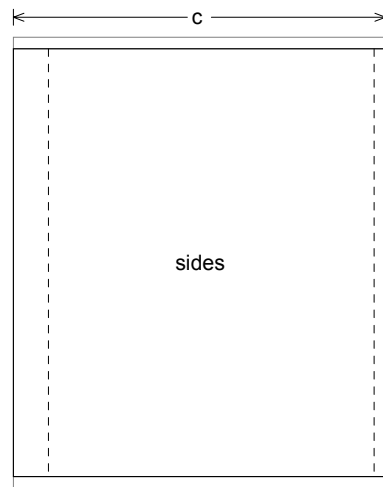
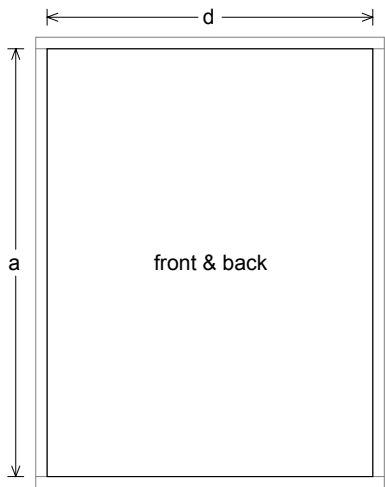
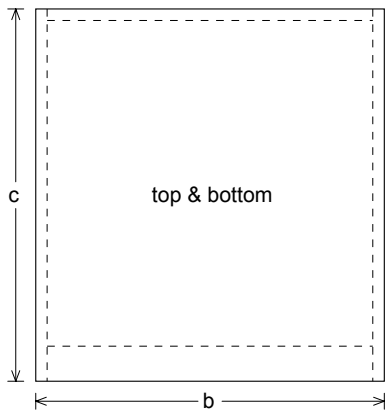
Qes = 0,41

Re = 6,6 ohms

Le = 1,63 mH

Z = 8, ohms

Pe = 400, watts



### Box Parts

Box Shape: Square Prism

1 Top, 1 Bottom: depth (c) = 583, mm  
width (b) = 546,, thickness = 18, mm

1 Front: height (a) = 670, mm

width (d) = 510,, thickness = 55, mm

1 Back: height (a) = 670, mm

width (d) = 510,, thickness = 18, mm

2 Sides: height (a) = 670, mm

depth (c) = 583,, thickness = 18, mm

--Driver Mounting--

Mounting: Flush

--Vent Parts--

1 Top, 1 Bottom:

width (e) = 430,, length (h) = 387,9 mm

thickness = 3,175 mm

2 Sides:

height (g) = 146,4, length (h) = 387,9 mm

thickness = 3,175 mm

