

SONU-Bauteile

SONU-Bauteile GmbH & CO KG
Glasfaserarmierte Produkte
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sonulan

der schallabsorbierende Luftkanal

sonulan

**Die Problemlösung für viele
Luft- und Klimaanlage**

sonulan

schallabsorbierend

sonulan

wärmedämmend und dampfdiffusionsoffen
geringer Wärmedurchgangswert
weitgehende Vermeidung von Kondensat

sonulan

feuchtigkeitsbeständig
Transport von Luft mit hoher relativer Feuchte
oder kurzzeitiger Kondensatanfall unproblematisch

sonulan

montagefertiges Kanalsystem
bestehend aus werkseitig gefertigten geraden
Kanalstücke, Bögen, Etagen, Reduzierungen

sonulan

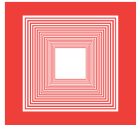
harte und streichfähige Oberfläche
Die äußere Schicht besteht aus
weißem Glasfaserleichtbeton

sonulan

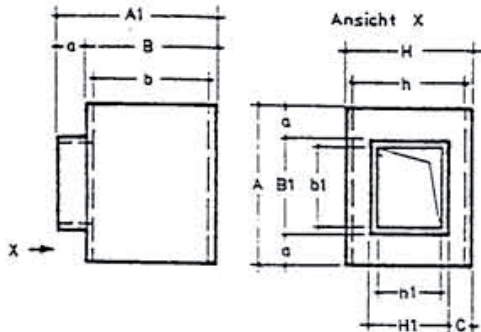
leicht zu verarbeiten

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nichtbrennbar

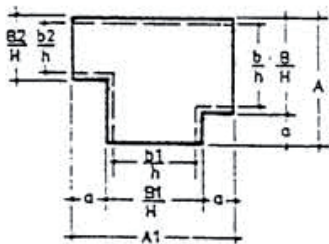


Formteilausführungen



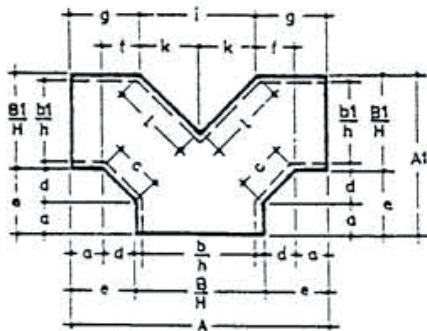
T-Stück 1 (T1)

$$\begin{aligned}
 L_1 &= A & U_1 &= 2B + 2H \\
 L_2 &= a & U_2 &= 2B_1 + 2H_1 \\
 A &= B_1 + 2a \\
 A_1 &= B + a
 \end{aligned}$$



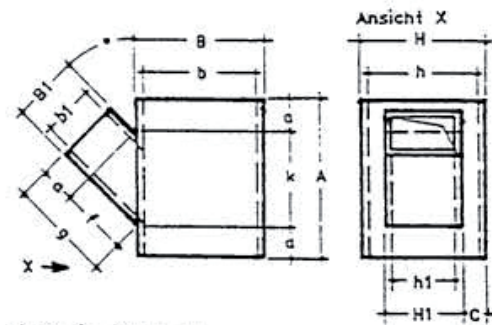
T-Stück 2 (T2)

$$\begin{aligned}
 L_1 &= A_1 & U_1 &= 2B + 2H \\
 L_2 &= A - B_2 & U_2 &= 2B_1 + 2H \\
 A &= B + a \\
 A_1 &= B_1 + 2a
 \end{aligned}$$



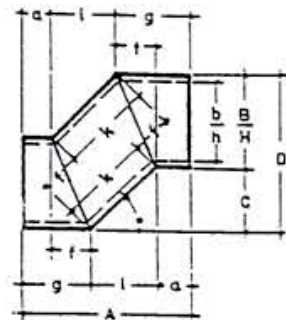
T-Stück 3 (T3)

$$\begin{aligned}
 L_1 &= 2g + 2l & U_1 &= 2B_1 + 2H \\
 L_2 &= a + c & U_2 &= 2B + 2H \\
 A &= B + 2e \\
 A_1 &= B_1 + e \\
 f &= B_1 \cdot 0,41421 \\
 g &= a + f \\
 i &= A - 2g \\
 k &= \frac{i}{2} \\
 l &= k \cdot 1,41422
 \end{aligned}$$



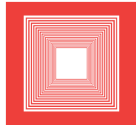
T-Stück 4 (T4)

$$\begin{aligned}
 L_1 &= A & U_1 &= 2B + 2H \\
 L_2 &= g & U_2 &= 2B_1 + 2H_1 \\
 A &= 2a + k \\
 g &= a + f \\
 L^\circ &= 30^\circ & 45^\circ & 60^\circ \\
 f &= B_1 \cdot 1,73205 & B_1 \cdot 1,0 & B_1 \cdot 0,57735 \\
 k &= B_1 \cdot 2,0 & B_1 \cdot 1,41422 & B_1 \cdot 1,15469
 \end{aligned}$$



Etage 30°, 45°, 60° (Et...)

$$\begin{aligned}
 L &= \sqrt{A^2 + D^2} & U &= 2B + 2H & g &= a + f \\
 A &= a + g + l & D &= B + C \\
 L^\circ &= 30^\circ & 45^\circ & 60^\circ \\
 f &= B \cdot 0,26795 & B \cdot 0,41421 & B \cdot 0,57735 \\
 k &= C \cdot 2,0 & C \cdot 1,41422 & C \cdot 1,15469 \\
 l &= C \cdot 1,73205 & C \cdot 1,0 & C \cdot 0,57735
 \end{aligned}$$



Formteilausführungen

nach DIN 18379 Ausgabe Sept. 1976

$m^2 = U \cdot L$ (U = größter Außenumfang, L = Berechnungslänge)

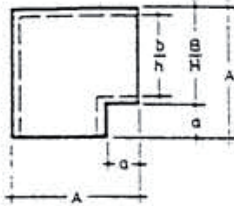
Wandstärken: Sonulan Kanal

22 mm
32 mm

Normmaße:

a = 100 mm
c = 70 mm
d = 50 mm
e = 150 mm

b, h = Kanallichtmaße
B, H = Kanalausmaße
(b + 2 x Wandstärke
h + 2 x Wandstärke)

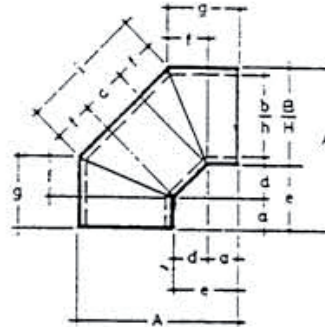


Bogen 90° (Bo)

$$L = 2A$$

$$U = 2B + 2H$$

$$A = B + a$$



Segmentbogen 90° 3-teilig (Sb3)

$$L = 2g + i$$

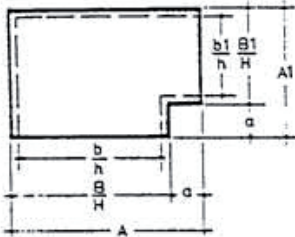
$$U = 2B + 2H$$

$$A = B + e$$

$$f = B \cdot 0,41421$$

$$g = a + f$$

$$i = c + 2f$$



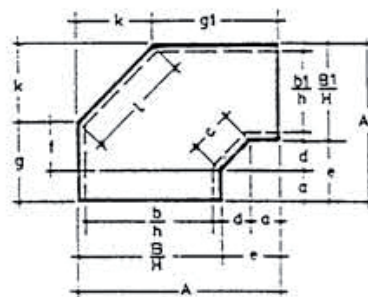
Übergangsbogen 1 (Ub1)

$$L = A + A_1$$

$$U = 2B + 2H$$

$$A = B + a$$

$$A_1 = B_1 + a$$



Übergangsbogen 2 (Ub2)

$$L = g + g_1 + l$$

$$U = 2B + 2H$$

$$A = B + e$$

$$A_1 = B_1 + e$$

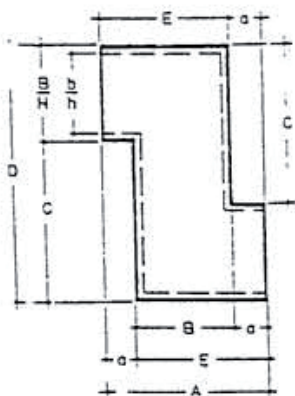
$$f = B_1 \cdot 0,41421$$

$$g = a + f$$

$$g_1 = A - k$$

$$k = A_1 - g$$

$$l = k \cdot 1,41422$$



S-Bogen 1 (Db1)

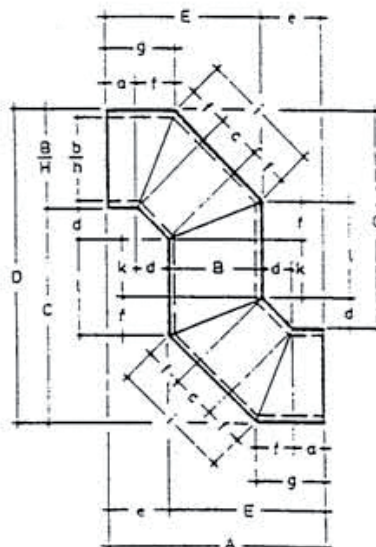
$$L = C + 2E + B$$

$$U = 2B + 2H$$

$$A = E + a$$

$$D = B + C$$

$$E = B + a$$



S-Bogen 2 (Db2)

$$L = 2g + 2i + l +$$

$$U = 2B + 2H$$

$$A = E + e$$

$$D = B + C$$

$$E = B + e$$

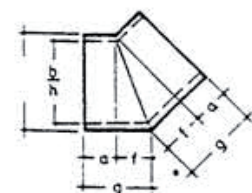
$$f = B \cdot 0,41421$$

$$g = a + f$$

$$i = c + 2f$$

$$k = C - B - 2d$$

$$l = k + f$$

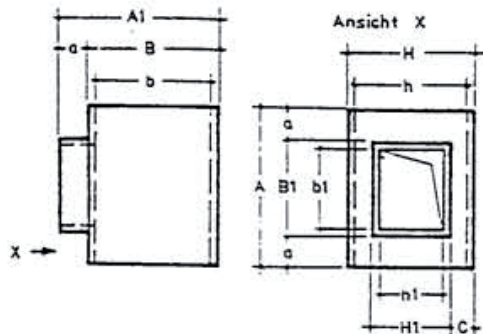


Segmentbogen 30°, 45°, 60°, 2-teilig (Sb2 ...)

$L = 2g$	$U = 2B + 2H$	$g = a + f$
$L^\circ = 30^\circ$	45°	60°
$f = B \cdot 0,26795$	$B \cdot 0,41421$	$B \cdot 0,57735$

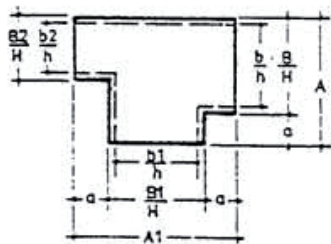


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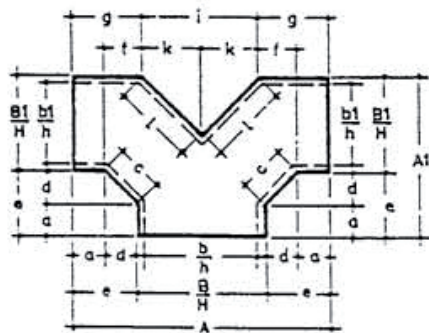
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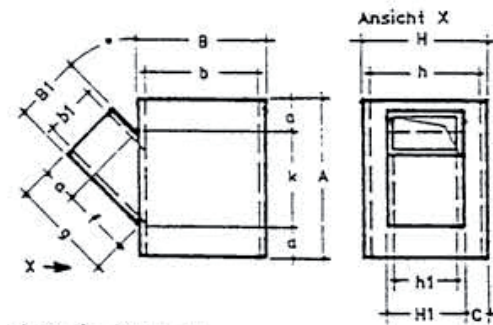
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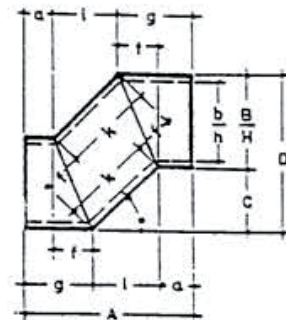
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