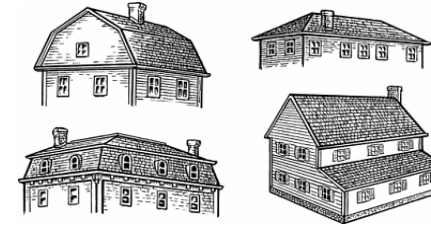




# Roof Assistant 1.0



For roof mounting, determine whether a stand or flush mounts are more needed.

- 1 Find the roof pitch angle (see below).
- 2 Find the latitude (see below).
- 3 Find the Minimum Collector Tilt Angle (see below).

If the roof pitch angle is below the minimum angle, a stand is necessary to increase the collector tilt angle above the minimum angle (see below). Duct flashing will also be needed.

If the roof pitch angle is above the minimum angle you will need flush mounts and duct flashing.

Roof Pitch (Slope)	
Rise:Run	Equivalent Angle (Deg)
3:12	14
4:12	18
5:12	23
6:12	27
8:12	34
10:12	40
12:12	45
14:12	49
16:12	53
18:12	56
20:12	59

Minimum Collector Tilt Angle			
Customer's Latitude (Deg)	No snow fall (Deg)	With snow fall (Deg)	Ideal Collector tilt angle (Deg)
30	30		45
35	35	45*	50
40	40	45*	55
45	45	45*	60
50	50	50*	65
55	55	90**	70
60	60	90**	75

\* Required collector tilt angle to help shed snow

\*\* For Heavy snow fall areas, 90 degree wall mounting is recommended

Latitude Finder					
Country	Web Link				
USA	<a href="http://www.heavens-above.com/selecttown.asp?CountryID=US&amp;lat=0&amp;lng=0&amp;alt=0&amp;loc=Unspecified&amp;TZ=CET">http://www.heavens-above.com/selecttown.asp?CountryID=US&amp;lat=0&amp;lng=0&amp;alt=0&amp;loc=Unspecified&amp;TZ=CET</a>				
Canada	<a href="http://www.heavens-above.com/selecttown.asp?CountryID=CA&amp;lat=0&amp;lng=0&amp;alt=0&amp;loc=Unspecified&amp;TZ=CET">http://www.heavens-above.com/selecttown.asp?CountryID=CA&amp;lat=0&amp;lng=0&amp;alt=0&amp;loc=Unspecified&amp;TZ=CET</a>				
The rest of the world	<a href="http://www.heavens-above.com/countries.asp#C">http://www.heavens-above.com/countries.asp#C</a>				

Stands Available from YSH
Angle (Deg)
30
45
60

Duct Flashing			
Roof Surface Type	YSH Part #	Model	Description

Shingled	1041	SHDFLASH	pair of Flexible Rubber Duct Flashing for 4-1/2" to 6" duct
Metal	1129	SHDFLSTLRF	pair of Flexible Rubber Duct Flashing for Steel roof only