

WORK SHEETS

**CALCULATE MAXIMUM
SPACING FOR**

**TRANSVERSE
AND
LONGITUDINAL**

**SEISMIC
SUPPORTS**

Maximum LONGITUDINAL Brace Spacing Worksheet

"G Factor"	1
What is the "G Factor" for the load to be braced?	<input style="width: 50px; height: 20px;" type="text"/>
Examples: OSHPD = .45 NFPA = .5	
Job Specification = ? U.B.C. '97 = ?	

Pipe, Duct, or Conduit Information 2 <p>Pipe, Duct, or Conduit Size / Type <input style="width: 100%;" type="text"/></p> <p>Weight of Filled Pipe per foot <input style="width: 100%;" type="text"/></p> <p>(If trapeze type hanger, list all pipes) <input style="width: 100%;" type="text"/></p> <p><input style="width: 100%;" type="text"/></p> <p>Weight of Insulation per foot (if present) <input style="width: 100%;" type="text"/></p> <p><input style="width: 100%;" type="text"/></p> <p style="text-align: right; color: red;">Total Weight Per Foot = <input style="width: 50px;" type="text"/></p>	Maximum Longitudinal Spacing Allowed (by Type): 3 <p>Fuel Gas Piping = 40 ft. max. Cast Iron Piping = 40 ft. max. No Hub Piping = 40 ft. max. Plastic Piping = 40 ft. max. Steel Piping = 80 ft. max. Copper Piping = 80 ft. max. Duct (SMACNA) = 60 ft. max.</p> <p style="color: red;">Total Wt. Per Foot x Max. Spacing Allowable x "G Factor" = Horiz. Wt. To Be Braced at Max. = <input style="width: 50px;" type="text"/></p>
--	--

Structural Attachment	4
Type of Attachment Required (steel, wood concrete) <input style="width: 100%;" type="text"/>	
Number of Anchors <input style="width: 100%;" type="text"/>	
Anchor Diameter <input style="width: 100%;" type="text"/>	
Anchor Embedment <input style="width: 100%;" type="text"/>	
Attachment Fig. # <input style="width: 100%;" type="text"/>	
Page Number in Book <input style="width: 100%;" type="text"/>	
Maximum Horizontal Allowable Load = <input style="width: 50px;" type="text"/> FROM BOOK	
Horiz. Wt. To Be Braced at Max. = <input style="width: 50px;" type="text"/> FROM ABOVE	

Brace Material	5
Type of Brace Material (pipe, strut) <input style="width: 100%;" type="text"/>	
Size <input style="width: 100%;" type="text"/>	
Maximum Length (See Pg. 1-15) <input style="width: 100%;" type="text"/>	
Maximum Horizontal Allowable Load = <input style="width: 50px;" type="text"/> FROM BOOK	
Horiz. Wt. To Be Braced at Max. = <input style="width: 50px;" type="text"/> FROM ABOVE	

Pipe / Hanger / Trapeze Longitudinal Attachment	6
Attachment Detail Number <input style="width: 100%;" type="text"/>	
Page Number <input style="width: 100%;" type="text"/>	
Maximum Horizontal Allowable Load = <input style="width: 50px;" type="text"/> FROM BOOK	
Horiz. Wt. To Be Braced at Max. = <input style="width: 50px;" type="text"/> FROM ABOVE	

•If **all** of the "Maximum Horizontal Allowable Loads" exceed the "Horiz. Wt. To Be Braced at Max.", then the "Maximum Spacing Allowed" may be used. Enter in box below.

•If **any** "Maximum Horizontal Allowable Load" is smaller than the "Horiz. Wt. To Be Braced at Max.", then this formula will yield a "Reduced Actual Allowable Spacing" for this particular brace assembly. Enter in box below.

$$\frac{\text{"Maximum Horizontal Allowable Load" of WEAKEST Component of Bracing Assembly}}{\text{"Total Weight Per Foot" x "G Factor"}} =$$

Actual Allowable LONGITUDINAL Spacing is:

Maximum TRANSVERSE Brace Spacing Worksheet

<p>"G Factor"</p> <p>What is the "G Factor" for the load to be braced?</p> <p>Examples: OSHPD = .45 NFPA = .5</p> <p> Job Specification = ? U.B.C. '97 = ?</p>	<div style="border: 1px solid red; width: 60px; height: 30px; background-color: yellow;"></div>	1
--	---	---

<p>Pipe, Duct, or Conduit Information 2</p> <p>Pipe, Duct, or Conduit Size / Type _____</p> <p>Weight of Filled Pipe per foot _____</p> <p>(If trapeze type hanger, list all pipes) _____</p> <p>Weight of Insulation per foot (if present) _____</p> <p style="text-align: right; color: red;">Total Weight Per Foot = </p>	<p>Maximum Transverse Spacing Allowed (by Type): 3</p> <p>Fuel Gas Piping = 20 ft. max.</p> <p>Cast Iron Piping = 20 ft. max.</p> <p>No Hub Piping = 20 ft. max.</p> <p>Plastic Piping = 20 ft. max.</p> <p>Steel Piping = 40 ft. max.</p> <p>Copper Piping = 40 ft. max.</p> <p>Duct (SMACNA) = 30 ft. max.</p> <p style="text-align: right; color: red;">Total Wt. Per Foot x Max. Spacing Allowable x "G Factor" =</p> <p style="text-align: right; color: red;">Horiz. Wt. To Be Braced at Max. = </p>
--	--

<p>Structural Attachment 4</p> <p>Type of Attachment Required (steel, wood concrete) _____</p> <p>Number of Anchors _____</p> <p>Anchor Diameter _____</p> <p>Anchor Embedment _____</p> <p>Attachment Fig. # _____</p> <p>Page Number in Book _____</p> <p style="text-align: right; color: red;">Maximum Horizontal Allowable Load = FROM BOOK</p> <p style="text-align: right; color: red;">Horiz. Wt. To Be Braced at Max. = FROM ABOVE</p>

<p>Brace Material 5</p> <p>Type of Brace Material (pipe, strut) _____</p> <p>Size _____</p> <p>Maximum Length (See Pg. 1-15) _____</p> <p style="text-align: right; color: red;">Maximum Horizontal Allowable Load = FROM BOOK</p> <p style="text-align: right; color: red;">Horiz. Wt. To Be Braced at Max. = FROM ABOVE</p>
--

<p>Pipe / Hanger / Trapeze Transverse Attachment 6</p> <p>Attachment Detail Number _____</p> <p>Page Number _____</p>	<p style="text-align: right; color: red;">Maximum Horizontal Allowable Load = FROM BOOK</p> <p style="text-align: right; color: red;">Horiz. Wt. To Be Braced at Max. = FROM ABOVE</p>
---	--

•If **all** of the "Maximum Horizontal Allowable Loads" exceed the "Horiz. Wt. To Be Braced at Max.", then the "Maximum Spacing Allowed" may be used. Enter in box below.

•If **any** "Maximum Horizontal Allowable Load" is smaller than the "Horiz. Wt. To Be Braced at Max.", then this formula will yield a "Reduced Actual Allowable Spacing" for this particular brace assembly. Enter in box below.

$$\frac{\text{"Maximum Horizontal Allowable Load" of WEAKEST Component of Bracing Assembly}}{\text{"Total Weight Per Foot" x "G Factor"}} =$$

Actual Allowable TRANSVERSE Spacing is: