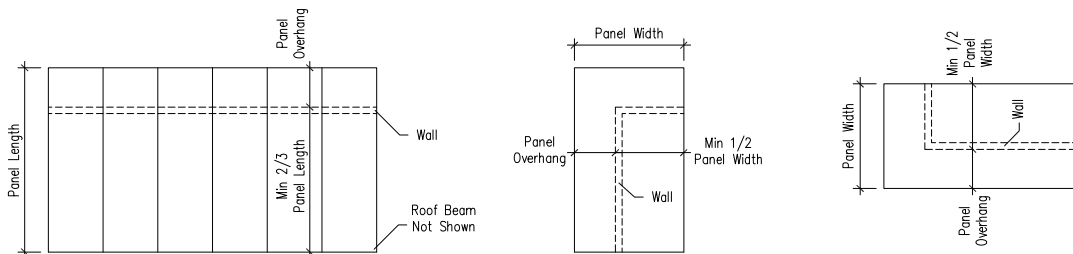


## Technical Bulletin

### Roof Panel Overhang Specified Load Charts National Building Code of Canada 2005 & 2010

**Table R-OH-1 ROOF PANEL TRANSVERSE DESIGN LOAD (psf)**



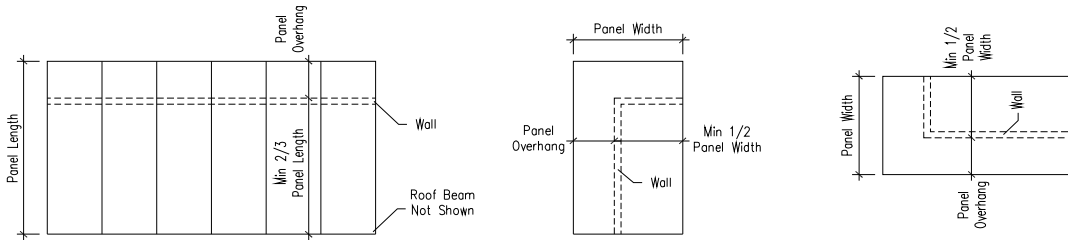
Revision: September 24, 2013

| ROOF PANEL OVERHANG (FEET) AT EAVE OR GABLE WALLS |         |                      |             |     |                             |            |            |            |           |                             |            |            |            |            |
|---|---------|----------------------|-------------|-----|-----------------------------|------------|------------|------------|-----------|-----------------------------|------------|------------|------------|------------|
| Thickness   |         | Allowable Deflection | OSB Splines |     | Single 2x @ 4'-0" on center |            |            |            |           | Double 2x @ 4'-0" on center |            |            |            |            |
| SIP   | EPS     |                      | 2           | 3   | 2                           | 3          | 4          | 5          | 6         | 2                           | 3          | 4          | 5          | 6          |
| 6 1/2"  | 5 5/8"  | L/360                | 60          | 40  | <b>198</b>                  | 93         | 55         | 36         | 24        | <b>207</b>                  | 129        | 70         | 45         | 31         |
|   |         | L/240                | 89          | 61  | <b>201</b>                  | <b>121</b> | 82         | 55         | 37        | <b>209</b>                  | <b>170</b> | 104        | 69         | 48         |
|   |         | L/180                | 112         | 81  | <b>201</b>                  | <b>121</b> | <b>92</b>  | 72         | 49        | <b>209</b>                  | <b>170</b> | <b>118</b> | 89         | 63         |
| 8 1/4"  | 7 3/8"  | L/360                | 70          | 49  | <b>209</b>                  | <b>146</b> | 85         | 57         | 40        | <b>214</b>                  | <b>189</b> | 118        | 74         | 51         |
|   |         | L/240                | 100         | 74  | <b>212</b>                  | <b>147</b> | <b>104</b> | <b>84</b>  | 60        | <b>217</b>                  | <b>192</b> | <b>145</b> | <b>109</b> | 77         |
|   |         | L/180                | 123         | 95  | <b>212</b>                  | <b>147</b> | <b>104</b> | <b>84</b>  | <b>70</b> | <b>217</b>                  | <b>192</b> | <b>145</b> | <b>109</b> | <b>89</b>  |
| 10 1/4"   | 9 3/8"  | L/360                | 78          | 61  | <b>293</b>                  | <b>186</b> | 122        | 84         | 60        | <b>293</b>                  | <b>195</b> | 176        | 119        | 80         |
|   |         | L/240                | 107         | 88  | <b>295</b>                  | <b>188</b> | 123        | 93         | 78        | <b>295</b>                  | <b>198</b> | 179        | 134        | <b>104</b> |
|   |         | L/180                | 130         | 111 | <b>295</b>                  | <b>188</b> | 123        | 93         | 78        | <b>295</b>                  | <b>198</b> | 179        | 134        | <b>104</b> |
| 12 1/4"   | 11 3/8" | L/360                | 84          | 64  | <b>320</b>                  | <b>196</b> | <b>143</b> | <b>104</b> | <b>83</b> | <b>320</b>                  | <b>198</b> | <b>181</b> | <b>156</b> | <b>118</b> |
|   |         | L/240                | 113         | 92  | <b>322</b>                  | <b>198</b> | <b>144</b> | <b>105</b> | <b>84</b> | <b>322</b>                  | <b>201</b> | <b>184</b> | <b>157</b> | <b>121</b> |
|   |         | L/180                | 136         | 113 | <b>322</b>                  | <b>198</b> | <b>144</b> | <b>105</b> | <b>84</b> | <b>322</b>                  | <b>201</b> | <b>184</b> | <b>157</b> | <b>121</b> |

**Notes:**

- Specified loads meet all strength and serviceability requirements of the National Building Code of Canada 2005 and 2010. Specified load values in the table are total specified loads - i.e. specified live (snow, rain and wind) plus specified dead load.
- The span of a sloped roof panel must be measured along the slope. Design loads are to be calculated as normal loads acting perpendicular to the face of the panel.
- Insulspan SIP System must be assembled as per Insulspan Installation Guide and recommended assembly details.
- Acceptable 2x lumber is SPF #2 & better.
- Insulspan SIP skins are nailed to the splines at vertical panel joints using minimum 8d box nails at 6" on center or equivalent.
- Insulspan SIP System core material is molded expanded polystyrene (EPS) insulation complying with the requirements of CAN/ULC-S701, type 1.
- Insulspan SIP System exterior skins are minimum 7/16" thick structural grade oriented strand board (OSB) conforming to DOC PS2, exposure 1 and CAN/CSA-O325.0 (span rating 1R24/2F16).
- The tabulated values are for roof panels with overhang along length direction. Roof panels with overhang along width direction are considered equivalent to roof panels with OSB splines.

**Table R-OH-2 ROOF PANEL TRANSVERSE DESIGN LOAD (psf)**



Revision: September 24, 2013

| Thickness |         | Allowable Deflection | ROOF PANEL OVERHANG (FEET) AT EAVE OR GABLE WALLS |     |     |     |                           |     |     |     |                          |     |     |     |     |     |     |  |
|-----------|---------|----------------------|---|-----|-----|-----|---------------------------|-----|-----|-----|--------------------------|-----|-----|-----|-----|-----|-----|--|
| SIP       | EPS     |                      | Single LVL @ 4' on center                         |     |     |     | Double LVL @ 4' on center |     |     |     | Wood I @ 4'-0" on center |     |     |     |     |     |     |  |
|           |         |                      | 2   | 3   | 4   | 5   | 6                         | 2   | 3   | 4   | 5                        | 6   | 2   | 3   | 4   | 5   | 6   |  |
| 6 1/2"    | 5 5/8"  | L/360                | 203   | 112 | 63  | 40  | 28                        | 210 | 160 | 85  | 54                       | 36  |     |     |     |     |     |  |
|           |         | L/240                | 206   | 163 | 94  | 60  | 42                        | 213 | 187 | 126 | 81                       | 54  |     |     |     |     |     |  |
|           |         | L/180                | 206   | 177 | 121 | 77  | 54                        | 213 | 187 | 162 | 105                      | 70  |     |     |     |     |     |  |
| 8 1/4"    | 7 3/8"  | L/360                | 212   | 185 | 103 | 65  | 44                        | 215 | 190 | 147 | 91                       | 62  | 216 | 172 | 95  | 61  | 43  |  |
|           |         | L/240                | 215   | 189 | 149 | 97  | 66                        | 218 | 193 | 174 | 134                      | 92  | 218 | 173 | 138 | 91  | 64  |  |
|           |         | L/180                | 215   | 189 | 167 | 124 | 84                        | 218 | 193 | 174 | 159                      | 119 | 218 | 173 | 149 | 117 | 83  |  |
| 10 1/4"   | 9 3/8"  | L/360                | 293   | 193 | 162 | 102 | 71                        | 293 | 195 | 177 | 149                      | 100 | 293 | 191 | 141 | 89  | 62  |  |
|           |         | L/240                | 295   | 196 | 175 | 148 | 104                       | 295 | 198 | 180 | 169                      | 147 | 295 | 194 | 177 | 129 | 92  |  |
|           |         | L/180                | 295   | 196 | 175 | 160 | 133                       | 295 | 198 | 180 | 169                      | 160 | 295 | 194 | 177 | 158 | 118 |  |
| 12 1/4"   | 11 3/8" | L/360                | 320   | 198 | 178 | 148 | 102                       | 320 | 200 | 183 | 172                      | 147 | 320 | 191 | 178 | 119 | 84  |  |
|           |         | L/240                | 322   | 200 | 181 | 170 | 148                       | 322 | 202 | 185 | 175                      | 166 | 322 | 194 | 180 | 166 | 122 |  |
|           |         | L/180                | 322   | 200 | 181 | 170 | 160                       | 322 | 202 | 185 | 175                      | 166 | 322 | 194 | 180 | 166 | 148 |  |

**Notes:**

1. Specified loads meet all strength and serviceability requirements of the National Building Code of Canada 2005 and 2010. Specified load values in the table are total specified loads - i.e. specified live (snow, rain and wind) plus specified dead load.
2. The span of a sloped roof panel must be measured along the slope. Design loads are to be calculated as normal loads acting perpendicular to the face of the panel.
3. Insulspan SIP System must be assembled as per Insulspan Installation Guide and recommended assembly details.
4. Acceptable LVL lumber is 1.8E LVL & better; acceptable wood-I joists are Nascor NJH, Jager JSI2000 or Trus Joist TJI 100C & better.
5. Insulspan SIP skins are nailed to the splines at vertical panel joints using minimum 8d box nails at 6" on center or equivalent.
6. Insulspan SIP System core material is molded expanded polystyrene (EPS) insulation complying with the requirements of CAN/ULC-S701, type 1.
7. Insulspan SIP System exterior skins are minimum 7/16" thick structural grade oriented strand board (OSB) conforming to DOC PS2, exposure 1 and CAN/CSA-O325.0 (span rating 1R24/2F16).
8. The tabulated values are for roof panels with overhang along length direction. Roof panels with overhang along width direction are considered equivalent to roof panels with OSB splines.