



CAT-SRP-2009- (2)



SARAVEL ROOF POWER BACKWARD VENTILATORS (SRP)



1. GENERAL

1.1 SARAVEL Backward roof mounted power ventilators (SRP) are completely self-contained exhaust systems, engineered expressly for schools, residences, hospitals, commercial buildings and other public, private, and industrial requirements. With air exhaust capacities ranging from 250 to 5500 CFM and static pressures from 1/8" to 3" of water, to cover the entire range of industrial and residential applications.

1.2 Standard unit shall consist of fan wheel, and hub, enclosed in scroll housing. The unit shall be secured on a structural steel or die formed base frame. The electric motor shall be mounted on the structural steel or die formed support and shall either directly drive the fan assembly.

1.3 Unit casing is constructed of heavy gage galvanized steel sheet, easily removable for access to internal components. Lifting lugs are provided at the four corners to facilitate lifting of the unit. Flanged base is provided for easy curb mounting.

2.0 FAN WHEEL

2.1 Fans shall be single-width, single inlet (SWSI), multi-blade type

2.2 Fan of models 122 thru 245 shall have backward inclined blades and shall be fabricated of hot rolled plate

2.3 Fan wheel and hub shall be statically and dynamically balanced to ISO 1940.

2.4 After subassembly fan mechanical vibration shall be measured as per ISO 2372.

3.0 HOUSING

3.1 Fan housing shall be fabricated from hot rolled black plate ST 37-2, mechanical properties to DIN 17100 and shall be continuously SMAW welded along the seam. Split housing shall be optional.

3.2 Fan inlet and outlet area shall be conforming to AMCA STD. 99-2001-82 and 99-2002-82.

3.3 Optional fan rotation and discharge shall conform to AMCA 99-2406

3.4 Intake cone shall be fabricated of cold rolled plate ST 12 to DIN 1623

4.0 MOTORS

4.1 Motors shall be (3 or 1) Phase-380V-50Hz-V5, with Class B insulation and shall operate at 950 & 1450 RPM.

4.2 Optional drive arrangements shall conform to AMCA 99-2404.

4.3 Motor base shall have provisions to adjust the V-belt tension.

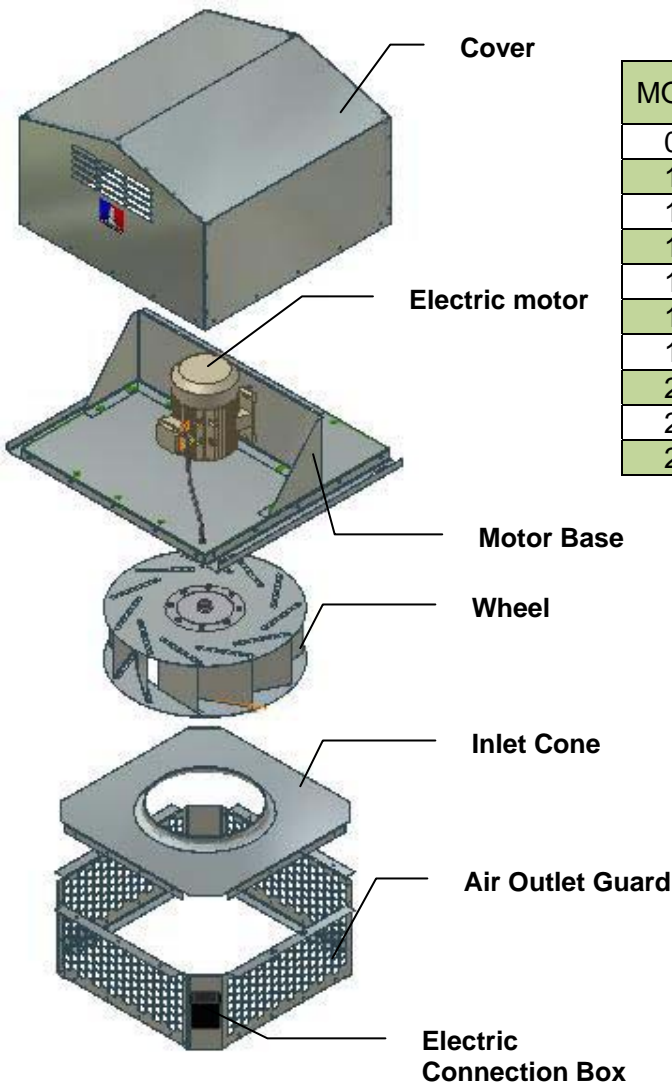
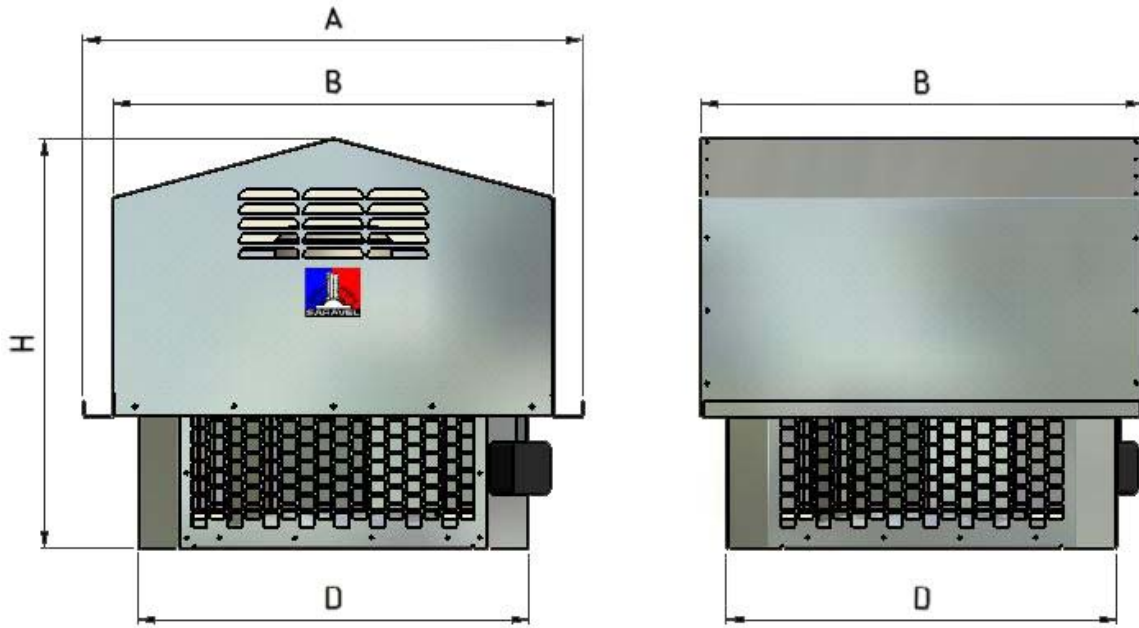
4.4 The standard motor is a continuous, heavy duty. Direct driven fans can be provided as per engineering specifications.

4.5 Explosion proof motors can be provided for applications where volatile or flammable gases are to be exhausted from the area.

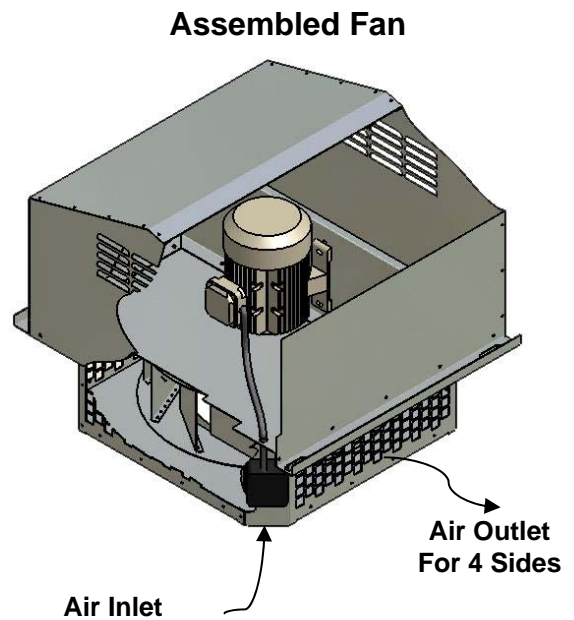
OPTIONAL FEATURES

1. For application in humid or corrosive environments epoxy coats or all stainless steel casing are available.
2. F class motors if humidity exists.
3. IP 55 motor protection if required.
4. In case of humid or corrosive environments Heavy duty safety disconnect switch in the motor enclosure.

DIMENSIONS & APPROXIMATE WEIGHT



| MODEL | A _(mm) | B _(mm) | D _(mm) | H _(mm) | WEIGHT _(Kg) |
|-------|-------------------|-------------------|-------------------|-------------------|------------------------|
| 098 | 547 | 457 | 380 | 509 | 35 |
| 108 | 567 | 477 | 400 | 519 | 37 |
| 122 | 587 | 497 | 420 | 529 | 40 |
| 135 | 607 | 517 | 440 | 539 | 45 |
| 150 | 657 | 567 | 490 | 554 | 50 |
| 165 | 707 | 617 | 540 | 564 | 55 |
| 182 | 757 | 667 | 590 | 669 | 75 |
| 200 | 807 | 717 | 640 | 684 | 90 |
| 222 | 857 | 767 | 690 | 734 | 105 |
| 245 | 907 | 817 | 740 | 754 | 115 |

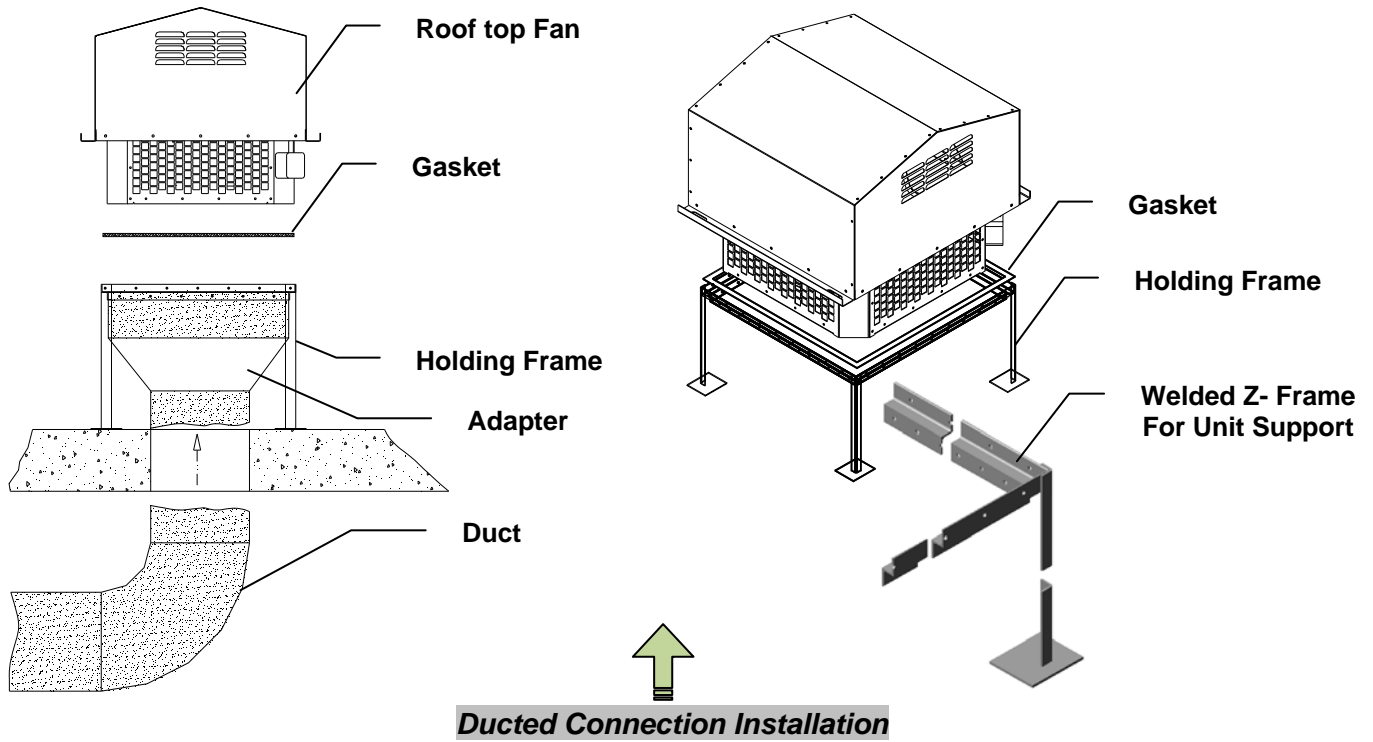




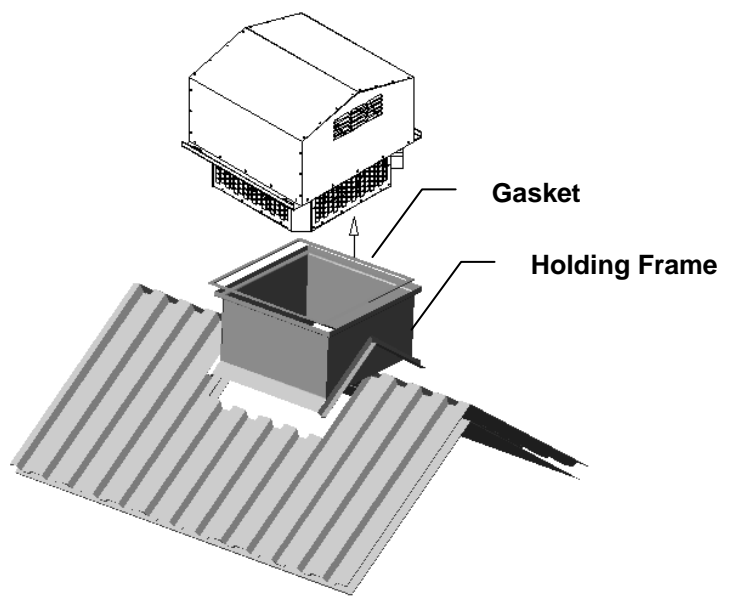
| SARAVEL ROOF POWER VENTILATOR RATINGS (3Phase) | | | | | | | | | | | |
|--|-------|------------|-------------|------------|-------------|-----------|-------|------------|-------------|------------|-------------|
| RPM | | 950 | | 1450 | | RPM | | 950 | | 1450 | |
| Model | T.S.P | FAN CFM | Motor HP | FAN CFM | Motor HP | Model | T.S.P | FAN CFM | Motor HP | FAN CFM | Motor HP |
| SRP - 98 | 0.125 | 298 | 0.08 | 502 | 0.08 | SRP - 165 | 0.25 | 1367 | 0.33 | ---- | ---- |
| | 0.25 | 241 | 0.08 | 466 | 0.08 | | 0.5 | 1186 | 0.33 | ---- | ---- |
| | 0.5 | ---- | ---- | 393 | 0.12 | | 0.75 | 991 | 0.33 | 2008 | 1.5 |
| | 0.75 | ---- | ---- | 307 | 0.12 | | 1 | ---- | ---- | 1888 | 1.5 |
| | 1 | ---- | ---- | ---- | ---- | | 1.25 | ---- | ---- | 1829 | 1.5 |
| | 1.25 | ---- | ---- | ---- | ---- | | 1.5 | ---- | ---- | 1644 | 1.5 |
| | 1.5 | ---- | ---- | ---- | ---- | | 2 | ---- | ---- | 1358 | 1.5 |
| | 2 | ---- | ---- | ---- | ---- | | 2.5 | ---- | ---- | ---- | ---- |
| SRP - 108 | 0.125 | 397 | 0.08 | ---- | ---- | SRP - 182 | 0.5 | 1697 | 0.5 | ---- | ---- |
| | 0.25 | 336 | 0.08 | 619 | 0.16 | | 0.75 | 1492 | 0.5 | 2806 | 2 |
| | 0.5 | ---- | ---- | 540 | 0.16 | | 1 | 1257 | 0.5 | 2677 | 2 |
| | 0.75 | ---- | ---- | 455 | 0.16 | | 1.25 | 886 | 0.5 | 2546 | 2 |
| | 1 | ---- | ---- | 340 | 0.16 | | 1.5 | ---- | ---- | 2414 | 2 |
| | 1.25 | ---- | ---- | ---- | ---- | | 2 | ---- | ---- | 2131 | 2 |
| | 1.5 | ---- | ---- | ---- | ---- | | 2.5 | ---- | ---- | 1793 | 2 |
| | 2 | ---- | ---- | ---- | ---- | | 3 | ---- | ---- | ---- | ---- |
| SRP - 122 | 0.125 | 566 | 0.08 | ---- | ---- | SRP - 200 | 0.5 | 2380 | 1 | ---- | ---- |
| | 0.25 | 499 | 0.08 | ---- | ---- | | 0.75 | 2162 | 1 | 3866 | 3 |
| | 0.5 | 341 | 0.08 | 791 | 0.25 | | 1 | 1928 | 1 | 3726 | 3 |
| | 0.75 | ---- | ---- | 701 | 0.25 | | 1.25 | 1799 | 1 | 3586 | 3 |
| | 1 | ---- | ---- | 602 | 0.25 | | 1.5 | 1273 | 1 | 3444 | 3 |
| | 1.25 | ---- | ---- | 464 | 0.25 | | 2 | ---- | ---- | 3149 | 3 |
| | 1.5 | ---- | ---- | ---- | ---- | | 2.5 | ---- | ---- | 2830 | 3 |
| | 2 | ---- | ---- | ---- | ---- | | 3 | ---- | ---- | 2458 | 3 |
| SRP - 135 | 0.125 | ---- | ---- | ---- | ---- | SRP - 222 | 0.5 | 3528 | 1.5 | ---- | ---- |
| | 0.25 | 700 | 0.12 | ---- | ---- | | 0.75 | 3286 | 1.5 | ---- | ---- |
| | 0.5 | 542 | 0.12 | 1101 | 0.5 | | 1 | 3037 | 1.5 | 5488 | 5.5 |
| | 0.75 | ---- | ---- | 1003 | 0.5 | | 1.25 | 2774 | 1.5 | 5331 | 5.5 |
| | 1 | ---- | ---- | 901 | 0.5 | | 1.5 | 2485 | 1.5 | 5173 | 5.5 |
| | 1.25 | ---- | ---- | 788 | 0.5 | | 2 | 1652 | 1.5 | 4853 | 5.5 |
| | 1.5 | ---- | ---- | 635 | 0.5 | | 2.5 | ---- | ---- | 4522 | 5.5 |
| | 2 | ---- | ---- | ---- | ---- | | 3 | ---- | ---- | 4171 | 5.5 |
| SRP - 150 | 0.125 | ---- | ---- | ---- | ---- | SRP - 245 | 0.5 | ---- | ---- | ---- | ---- |
| | 0.25 | 998 | 0.25 | ---- | ---- | | 0.75 | 4555 | 3 | ---- | ---- |
| | 0.5 | 832 | 0.25 | 1559 | 0.75 | | 1 | 4288 | 3 | ---- | ---- |
| | 0.75 | 626 | 0.25 | 1453 | 0.75 | | 1.25 | 4012 | 3 | ---- | ---- |
| | 1 | ---- | ---- | 1344 | 0.75 | | 1.5 | 3721 | 3 | ---- | ---- |
| | 1.25 | ---- | ---- | 1230 | 0.75 | | 2 | 3051 | 3 | ---- | ---- |
| | 1.5 | ---- | ---- | 1105 | 0.75 | | 2.5 | 2131 | 3 | ---- | ---- |
| | 2 | ---- | ---- | 683 | 0.75 | | 3 | ---- | ---- | ---- | ---- |



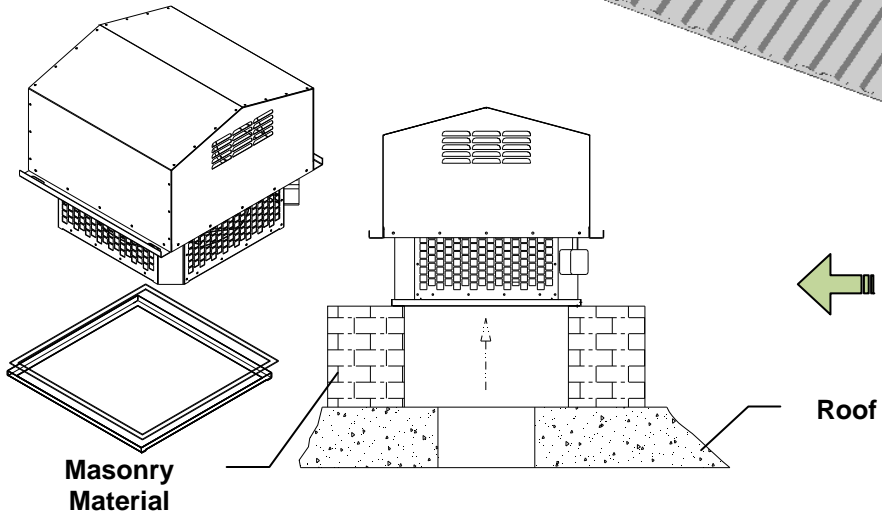
| SARAVEL ROOF POWER VENTILATOR RATINGS (1Phase) | | | | | | | | | | | |
|--|-------|------|-------|------|-------|-----------|-------|------|-------|------|-------|
| RPM | | 950 | | 1450 | | RPM | | 950 | | 1450 | |
| Model | T.S.P | FAN | Motor | FAN | Motor | Model | T.S.P | FAN | Motor | FAN | Motor |
| | | CFM | HP | CFM | HP | | | CFM | HP | CFM | HP |
| SRP - 98 | 0.125 | 298 | 0.08 | 502 | 0.12 | SRP - 165 | 0.25 | 1367 | 0.33 | ---- | ---- |
| | 0.25 | 241 | 0.08 | 466 | 0.12 | | 0.5 | 1186 | 0.33 | ---- | ---- |
| | 0.5 | ---- | ---- | 393 | 0.12 | | 0.75 | 991 | 0.33 | 2008 | 1.5 |
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| | 1 | ---- | ---- | ---- | ---- | | 1.25 | ---- | ---- | 1829 | 1.5 |
| | 1.25 | ---- | ---- | ---- | ---- | | 1.5 | ---- | ---- | 1644 | 1.5 |
| | 1.5 | ---- | ---- | ---- | ---- | | 2 | ---- | ---- | 1358 | 1.5 |
| | 2 | ---- | ---- | ---- | ---- | | 2.5 | ---- | ---- | ---- | ---- |
| SRP - 108 | 0.125 | 397 | 0.08 | ---- | ---- | SRP - 182 | 0.5 | 1697 | 0.5 | ---- | ---- |
| | 0.25 | 336 | 0.08 | 619 | 0.16 | | 0.75 | 1492 | 0.5 | 2806 | 2 |
| | 0.5 | ---- | ---- | 540 | 0.16 | | 1 | 1257 | 0.5 | 2677 | 2 |
| | 0.75 | ---- | ---- | 455 | 0.16 | | 1.25 | 886 | 0.5 | 2546 | 2 |
| | 1 | ---- | ---- | 340 | 0.16 | | 1.5 | ---- | ---- | 2414 | 2 |
| | 1.25 | ---- | ---- | ---- | ---- | | 2 | ---- | ---- | 2131 | 2 |
| | 1.5 | ---- | ---- | ---- | ---- | | 2.5 | ---- | ---- | 1793 | 2 |
| | 2 | ---- | ---- | ---- | ---- | | 3 | ---- | ---- | ---- | ---- |
| SRP - 122 | 0.125 | 566 | 0.08 | ---- | ---- | SRP - 200 | 0.5 | 2380 | 1 | ---- | ---- |
| | 0.25 | 499 | 0.08 | ---- | ---- | | 0.75 | 2162 | 1 | 3866 | 3 |
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| | 1.25 | ---- | ---- | 464 | 0.25 | | 2 | ---- | ---- | 3149 | 3 |
| | 1.5 | ---- | ---- | ---- | ---- | | 2.5 | ---- | ---- | 2830 | 3 |
| | 2 | ---- | ---- | ---- | ---- | | 3 | ---- | ---- | 2458 | 3 |
| SRP - 135 | 0.125 | ---- | ---- | ---- | ---- | SRP - 222 | 0.5 | ---- | ---- | ---- | ---- |
| | 0.25 | 700 | 0.12 | ---- | ---- | | 0.75 | ---- | ---- | ---- | ---- |
| | 0.5 | 542 | 0.12 | 1101 | 0.5 | | 1 | ---- | ---- | ---- | ---- |
| | 0.75 | ---- | ---- | 1003 | 0.5 | | 1.25 | ---- | ---- | ---- | ---- |
| | 1 | ---- | ---- | 901 | 0.5 | | 1.5 | ---- | ---- | ---- | ---- |
| | 1.25 | ---- | ---- | 788 | 0.5 | | 2 | ---- | ---- | ---- | ---- |
| | 1.5 | ---- | ---- | 635 | 0.5 | | 2.5 | ---- | ---- | ---- | ---- |
| | 2 | ---- | ---- | ---- | ---- | | 3 | ---- | ---- | ---- | ---- |
| SRP - 150 | 0.125 | ---- | ---- | ---- | ---- | SRP - 245 | 0.5 | ---- | ---- | ---- | ---- |
| | 0.25 | 998 | 0.25 | ---- | ---- | | 0.75 | ---- | ---- | ---- | ---- |
| | 0.5 | 832 | 0.25 | 1559 | 0.75 | | 1 | ---- | ---- | ---- | ---- |
| | 0.75 | 626 | 0.25 | 1453 | 0.75 | | 1.25 | ---- | ---- | ---- | ---- |
| | 1 | ---- | ---- | 1344 | 0.75 | | 1.5 | ---- | ---- | ---- | ---- |
| | 1.25 | ---- | ---- | 1230 | 0.75 | | 2 | ---- | ---- | ---- | ---- |
| | 1.5 | ---- | ---- | 1105 | 0.75 | | 2.5 | ---- | ---- | ---- | ---- |
| | 2 | ---- | ---- | 683 | 0.75 | | 3 | ---- | ---- | ---- | ---- |



Sloped Roof Installation Method



Flat Roof Installation Method





SARAVEL CORP.
Aug. 2009

Manufacturer reserves the right to make changes in design and construction, without notice.

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