

PERFORMANCE PIPE IPS PRODUCTS **SOFT-SIDED** BUNDLES (20',40' & 50' Joints)

| Size (Note 1) | Bundle Style | Pipe OD | Joints Per Bundle | Bundles Per Truck 20'/40'/50' | Joints Per Truck 20'/40'/50' | DR | Feet Per Truck 20' Joints | Feet Per Truck 40' Joints | Feet Per Truck 50' Joints |
|------------------|-----------------|------------|-------------------------|-------------------------------------|------------------------------------|-----------------------|---------------------------------|---------------------------------|---------------------------------|
| 3" | Soft | 3.500" | 50 | 20 / 10 / NA | 1,000 / 500 / NA | 7 | 20,000' | 20,000' | N/A |
| | | | | 26 / 13 / NA | 1,300 / 650 / NA | 9 | 26,000' | 26,000' | N/A |
| | | | | 28 / 14 / NA | 1,400 / 700 / NA | 11-19 | 28,000' | 28,000' | N/A |
| 4" | Soft | 4.500" | 29 | 22 / 11 / 9 | 638 / 319 / 261 | / 319 / 261 7 12,760' | | 12,760 | 13,050' |
| | | | | 28 / 14 / 11 | 812 / 406 / 319 | 9 | 16,240' | 16,240' | 15,950' |
| | | | | 28 / 14 / 13 | 812 / 406 / 377 | 11 | 16,240' | 16,240' | 18,850' |
| | | | | 28 / 14 / 14 | 812 / 406 / 406 | 13.5 -19 | 16,240' | 16,240' | 20,300' |
| 6" | Soft | 6.625" | 13 | 22 / 11 / 9 | 286 / 143 / 117 | 7 | 5,720' | 5,720' | 5,850' |
| | | | | 28 / 14 / 11 | 364 / 182 / 143 | 64 / 182 / 143 9 | | 7,280' | 7,150' |
| | | | | 28 / 14 / 14 | 364/ 182 / 182 | 11 - 19 | 7,280' | 7,280' | 9,100' |
| 8" | Soft | 8.625" | 9 | 20 / 10 / 10 | 180 / 90 / 90 | | 3,600' | 3,600' | <mark>3600'</mark> |
| | | | | 20 / 10 / 10 | <mark>180 / 90 / 90</mark> | 9 | 3,600' | 3,600' | <mark>4500'</mark> |
| | | | | 20 / 10 / 10 | 180 / 90 / 90 | 11-19 | 3,600' | 3,600' | 4,500' |

Note 1: GAS DISTRIBUTION When travelling in states with a 13' 6" maximum height restriction shipping 13 or 14 bundles of 3" or 6" may exceed the height restriction unless the trailer height is 58" or below (depending on the thickness of the bottom board utilized).

Performance Pipe, a division of Chevron Phillips Chemical Company LP 5085 W. Park Blvd, Suite 500

Plano, TX 75093

Phone: 800-527-0662



2. Soft - Sided Style:

For encasing all straight lengths between 3.500" OD and 8.625" OD.

Lumber Sizes and Placement:

- (a) Will be constructed using 3" x 4" bottom boards for GAS DISTRIBUTION (SERIES 6500-8100-8300).(3" x 4" boards actually have a thickness of approximately 2.5", not to be less than 2") Hardwood or softwood is acceptable. Grooved boards are preferable, but not mandatory as the banding will create a notch in some soft woods securing the banding in place.
- (b) The bottom board length requirement is that the bottom board must go past the center point of the outer joints but not extend past the outer edge of the outer joint.

| IPS Pipe Size | Target Board Length |
|---------------|------------------------|
| 3" | 42" (+0.75", -0.00") |
| 4" | 42" (+0.75", -0.00") |
| 6" | 42" (+0.75", -0.00") |
| 8" | 42" (+0.75", -0.00") |

- (c) Bottom boards are spaced at three (3) equidistant locations for twenty-foot (20') joints.
- (d) Bottom boards are spaced at six (6) equidistant locations for forty-foot (40') joints.
- (e) Bottom boards are spaced at seven (7) or eight (8) equidistant locations for fifty-foot (50') joints depending on bundling cart and plant.

(2) Top Boards:

- (a) Top boards may be used to increase the stability of 3" to 8" soft bundles at manufacturer's discretionor at the customer's request.
- (b) Top boards are placed on each end of the bundle, in line with the end bottom board. (Optional middle top boards are acceptable)
- (c) Top boards may be constructed of 2" X 6" boards. The thickness of the top board should not exceed the thickness of the bottom board. Hardwood or softwood is acceptable.
- (d) The top board length **requirement** is that the top board must go past the center point of the outer joints but not extend past the outer edge of the outer joint.

| IPS Pipe Size | Target Board Length |
|---------------|----------------------|
| 3" | 42" (+0.75", -0.00") |
| 4" | 42" (+0.75", -0.00") |
| 6" | 42" (+0.75", -0.00") |
| 8" | 42" (+0.75", -0.00") |

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(3) Banding:

It is important that each band on a soft-side bundle be tightened to the same tension. Air regulated or battery-operated banding equipment is acceptable. Use at least one 3/4" X .040 or 3/4" X .050 polyester banding per bottom board. If using 5/8" X .035 polyester place one band around pipe between boards. At the plant's discretion one band may please placed around the pipe on each end of the pack to help secure the caps/plugs and to stabilize the pack.

(4) Storage:

Soft-side bundles must be stacked plumb to prevent leaning. Special care must be taken when staging bundles in storage. Packs may be stacked in the plant yard on lumber to prevent the bottom of the pipe from coming in contact with the ground.

(5) Transport:

Performance Pipe Transport Strapping Policy (A.10 Pckg EXH2-Strapping Table) establishes minimum requirements regarding the number of trucker straps used by all transportation providers to secure bundles. The policy also contains conditions regarding the tightening of straps after a carrier leaves a Performance Pipe facility.

(6) Tarping:

All pipe series may, at customer request, be smoked tarped, 1/3 tarped or full tarped depending on customer requirement. Performance Pipe's definition of

- Smoke tarp- at least 8' back on top and 4' in front and on sides
- 1/3 tarp- covering all product at minimal 1/3 of the load
- Full tarp- covering all product.

An individual customer requirement may override this definition.

(Customer requested tarping of any load will incur additional expense to the customer. Any damage caused by tarp is the sole responsibility of the customer requesting a tarp.)

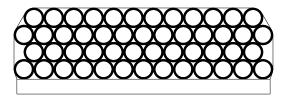
(7) End Caps:

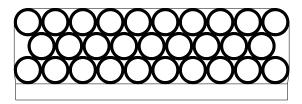
Place ventilated end caps (or plugs) on all 6500-8100-8300 series products.

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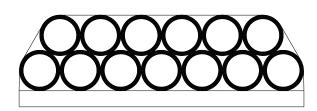
IPS - **Soft Sided** Bundles (Examples)

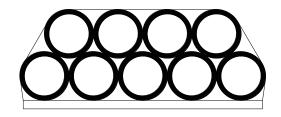




3" IPS 50 Joints Per Bundle

4" IPS 29 Joints Per Bundle





6" IPS 13 joints Per Bundle 8" IPS
9 joints per bundle
GAS DISTRIBUTION ONLY



<u>IPS – Soft Sided Bundle Patterns</u> (20', 40' & 50' Joints)

| Size | Pipe OD | Bundle Style | Bundle Height (Note 2) | BTM Board Length (Note 1) | Joints Per Bundle | Bundles Per Truck 20'/40'/50' | Bundle Pattern | DR | Feet Per 20' Bundle | Feet Per 40' Bundle | Feet Per 50' Bundle |
|----------|------------|-----------------|------------------------------|------------------------------------|-------------------------|-------------------------------------|-------------------|---------|---------------------------|---------------------------|---------------------------|
| | | | | | | 20/10/NA | | 7 | 1,000' | 2,000' | N/A |
| 3" | 3.500" | Soft | 15.093" | 42" | 50 | 26/13/NA | 13/12/13/12 | 9 | 1,000' | 2,000' | N/A |
| (Note 3) | | | | | | 28/14/NA | | 11-19 | 1,000' | 2,000' | N/A |
| | 4.500" | Soft | 14.794" | 42" | 29 | 22/11/9 | 10/9/10 | 7 | 580' | 1,160' | 1,450' |
| 433 | | | | | | 28/14/11 | | 9 | 580' | 1,160' | 1,450' |
| 4" | | | | | | 28/14/13 | | 11 | 580' | 1,160' | 1,450' |
| | | | | | | 28/14/14 | | 13.5-19 | 580' | 1,160' | 1,450' |
| | | | | | | 22/11/9 | | 7 | 260' | 520' | 650' |
| 6" | 6.625" | Soft | 14.862" | 42" | 13 | 28/14/11 | 7/6 | 9 | 260' | 520' | 650' |
| (Note 3) | | | | | | 28/14/14 | | 11-19 | 260' | 520' | 650' |
| 8" | 8.625" | Soft | 18.594" | 42" | 9 | 20/10/10 | 5/4 | 11-19 | 180' | 360' | 450' |

Note 1 : Figure Is also top board length

Note 2: Bundle height determined using 2 1/2" thick boards.

Note 3: When travelling in states with a 13' 6" maximum height restriction shipping 13 or 14 bundles of 3" or 6" may exceed the height restriction unless the trailer height is 58" or below (depending on the thickness of the bottom

board utilized).

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