## ASTM D2241 IPS SPECIFICATION DATA

Diamond IPS pressure-rated PVC pipe is made of compounds conforming to material requirements of ASTM D2241 in accordance with ASTM D1784. Pipe sizes (2" through 12") are made with an integral bell to utilize the Rieber gasket system for sealing, and meeting specifications defined in ASTM F477 which conforms to the requirements of ASTM D3139.

Diamond IPS pressure-rated PVC pipe meets all the dimensional, chemical, and physical requirements as outlined in ASTM D2241. Potable water pipe carries the mark of NSF, International in accordance with Standard 61. Some factory locations produce IPS pressure pipe bearing the mark of NSF-14.

Each male end shall be beveled to facilitate joining and reference marked to insure proper insertion depth. Diamond furnished lubricant is to be used in the joining process.

## D2241

PHYSICAL PROPERTIES OF PVC 12454:

| Property | ASTM Test | Minimum |
| :---: | :---: | :---: |
| Specific Gravity | D792 | 1.40 |
| Tensile Strength, psi | D638 | 7,000 |
| Tensile Modulus, psi | D638 | 400,000 |
| IZOD Impact Strength | D256 | $.65 \mathrm{ft} ., \mathrm{lb} . / \mathrm{in}$. |

SHORT FORM Specification for Diamond PVC Water Pipe. Diamond PVC Water Pipe shall be made of compounds conforming to ASTM D1784 with a cell classification of 12454. Diamond PVC Water Pipe must meet all the conforming to Amensional, chemical, and physical requirements as outlined in ASTM D2241 and will be supplied in 20 and 22 foot laying lengths. Joints shall be formed using Rieber Technology. Potable water pipe shall be manufactured from NSF listed ingredients.


## RIEBER JOINT ILLUSTRATION



## ASTM D2241

SPECIFICATION DATA. DIAMOND IPS PRESSURE-RATED PIPE IS SUPPLIED IN 20 AND 22 FOOT LAYING LENGTHS.

| Nominal Pipe Size in. (mm) | B Bell Socket Diameter Inches | D <br> Insert Mark 1 Inches * | E Insert Mark 2 Inches * |
| :---: | :---: | :---: | :---: |
| 2" (50) | 3-1/8" | 2-3/4" | 3-3/4" |
| 2.5" (62.5) | 4-3/8" | 3" | $4 "$ |
| 3" (75) | 4-7/16" | 3-5/8" | 4-5/8" |
| 4" (100) | 5-1/2" | 4-1/4" | 5-1/4" |
| $6^{\prime \prime}$ (150) | 8-1/4" | 4-3/4" | 5-3/4" |
| 8" (200) | 10-1/4" | 4-7/8" | 5-7/8" |
| 10" (250) | 12-7/8" | 5-1/2" | 6-1/2" |
| 12" (300) | 15-1/8" | 5-7/8" | 6-7/8" |

Prices are subject to a firm policy of "Price in effect at time of shipment on regular purchases" "Possession of this page does not constitute an offer of sale" *Tolerance of $+/-1 / 4$ " allowed"
(NSF:
PVCPIPE

## D2241 IPS PVC PRESSURE PIPE SPECIFICATION DATA

ASTM D2241
SPECIFICATION DATA

| Nominal Pipe Size in. (mm) | A Outside Diameter Inches | $\begin{gathered} \mathrm{t} \\ \text { SDR } 13.5315 \text { psi } \\ \text { Inches } \end{gathered}$ | $\begin{gathered} \mathrm{t} \\ \text { SDR } 17250 \text { psi } \\ \text { Inches } \end{gathered}$ | $\begin{gathered} \mathrm{t} \\ \text { SDR } 21200 \text { psi } \\ \text { Inches } \end{gathered}$ | $\begin{gathered} \mathrm{t} \\ \text { SDR } 26160 \text { psi } \\ \text { Inches } \end{gathered}$ | $\begin{gathered} \stackrel{\mathrm{t}}{\text { SDR }} 32.5125 \text { psi } \\ \text { Inches } \end{gathered}$ | $\begin{gathered} \mathrm{t} \\ \text { SDR } 41^{100} \text { psi } \\ \text { Inches } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MINIMUM WALL THICKNESS $=(\mathrm{t})$ |  |  |  |  |  |  |  |
| 2" (50) | 2.375 | 0.176 | 0.140 | 0.113 | 0.091 |  |  |
| 2.5" (62.5) | 2.875 | 0.213 | 0.169 | 0.137 | 0.110 |  |  |
| 3" (75) | 3.500 | 0.259 | 0.206 | 0.167 | 0.135 |  |  |
| $4^{\prime \prime}$ (100) | 4.500 | 0.333 | 0.265 | 0.214 | 0.173 | 0.138 | 0.110 |
| $6^{\prime \prime}(150)$ | 6.625 | 0.491 | 0.390 | 0.316 | 0.255 | 0.204 | 0.162 |
| $8^{\prime \prime}(200)$ | 8.625 |  | 0.508 | 0.410 | 0.332 | 0.265 | 0.210 |
| 10" (250) | 10.750 |  | 0.632 | 0.511 | 0.413 | 0.331 | 0.262 |
| 12" (300) | 12.750 |  | 0.750 | 0.606 | 0.490 | 0.392 | 0.311 |

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## ASTM D2241

ASTM D2241 LOADING CHART

| Nominal Pipe Size in. (mm) | Outside Diameter | JointsPer Bundle | Feet Per Bundle $20^{\prime}$ laying lengths | ${ }^{*}$ Feet Per Truckload 20' laying lengths | Feet Per Bundle 22' laying lengths | *Feet Per Truckload 22' laying lengths |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SDR-41 PRESSURE RATING 100 PSI |  |  |  |  |  |  |
| $4^{\prime \prime}(100)$ | 4.500 | 63 | 1,260 | 20,160 | 1,386 | 22,176 |
| $6^{\prime \prime}(150)$ | 6.625 | $35 \backslash 40$ | 560/640/700/800 | 8,400 | 7701880 | 9,240 |
| 8" ${ }^{\prime \prime}$ (200) | 8.625 | 20124 | 300/360/400/480 | 4,840 | $440 \backslash 528$ | 5,324 |
| 10" (250) | 10.750 | $12 \backslash 15$ | 240/300 | 3,240 | 2641330 | 3,564 |
| 12" (300) | 12.750 | $9 \backslash 12$ | 120/160/180/240 | 1,960 | $198 \backslash 264$ | 2,156 |
| SDR-32.5 PRESSURE RATING 125 PSI |  |  |  |  |  |  |
| $4^{\prime \prime}(100)$ | 4.500 | 63 | 1,260 | 20,160 | 1,386 | 22,176 |
| $6^{\prime \prime}(150)$ | 6.625 | $35 \backslash 40$ | 560/640/700/800 | 8,400 | 7701880 | 9,240 |
| 8" ${ }^{\prime \prime}$ (200) | 8.625 | 20124 | 300/360/400/480 | 4,840 | $440 \backslash 528$ | 5,324 |
| 10" (250) | 10.750 | $12 \backslash 15$ | 240/300 | 3,240 | 2641330 | 3,564 |
| 12" (300) | 12.750 | $9 \backslash 12$ | 120/160/180/240 | 1,960 | $198 \backslash 264$ | 2,156 |
| SDR-26 PRESSURE RATING 160 PSI |  |  |  |  |  |  |
| $2^{\prime \prime}(50)$ | 2.375 | 215 | 4,300 | 68,800 | 4,730 | 75,680 |
| 2.5" (62.5) | 2.875 | 131 | 2,620 | 41,920 | 2,882 | 46,112 |
| 3" (75) | 3.500 | 88/95 | 1,760/1,900 | 29,280 | 1,936/2,090 | 32,208 |
| $4^{\prime \prime}(100)$ | 4.500 | 63 | 1,260 | 20,160 | 1,386 | 22,176 |
| $6^{\prime \prime}$ (150) | 6.625 | $35 \backslash 40$ | 560/640/700/800 | 8,400 | $770 \backslash 880$ | 9,240 |

