## End Sections

## Easily installed, easily maintained culvert end treatments for corrugated metal pipe, reinforced concrete pipe and HDPE Pipe

Contech End Sections provide a practical, economical and hydraulically superior method of finishing a variety of culvert materials.

The lightweight, flexible metal construction of Contech End Sections creates an attractive, durable and erosion-preventing treatment for all sizes of culvert inlets and outlets. They can be used with corrugated metal pipe having either annular or helical corrugations, and both reinforced concrete and plastic pipes. End sections can be salvaged when lengthening or relocating the culvert.

Standard End Sections are fabricated from pregalvanized steel. For added corrosion resistance, Aluminized Type 2 or Aluminum End Sections are available in smaller sizes. Special End Sections for multiple pipe installations may be available on a specific inquiry basis.

## Better hydraulics

Flow characteristics are greatly improved by the exacting design of Contech End Sections. Scour and sedimentation conditions are improved, and headwater depth can be better controlled. Culverts aligned with the stream flow and finished with Contech End Sections generally require no additional hydraulic controls.

## Improved appearance

Contech End Sections blend well with the surroundings. The tapered sides of an End Section merge with slope design to improve roadside appearance. Unsightly weeds and debris collection at the culvert end are reduced.

## Economical installation

Lightweight equipment and simple crew instructions result in smooth and easy installation. Contech End Sections are easily joined to culvert barrels, forming a continuous, onepiece structure. For easiest installation, End Sections should be installed at the same time as the culvert. Installation is completed by tamping soil around the End Section.

## Low maintenance

Contech End Sections reduce maintenance expense because their tapered design promotes easier mowing and snow removal. There is no obstruction to hamper weed cutting.


## Notes for all End Sections:

1. All three-piece bodies to have 12 GA sides and 10 GA center panels. Multiple panel bodies to have lap seams which are to be tightly joined by galvanized rivets or bolts.
2. For $60^{\prime \prime}$ through $84^{\prime \prime}$ sizes, reinforced edges are supplemented with stiffener angles. The angles are attached by galvanized nuts and bolts. For the $66^{\prime \prime}$ and $72^{\prime \prime}$ round equivalent pipe-arch sizes, reinforced edges are supplemented by angles. The angles are attached by galvanized nuts and bolts.
3. Angle reinforcements are placed under the center panel seams on the $66^{\prime \prime}$ and $72^{\prime \prime}$ round equivalent pipe-arch sizes.
4. Toe plate is available as an accessory, when specified on the order, and will be same gage (GA) as the End Section.
5. Stiffener angles, angle reinforcement, and toe plates are the same base metal as end section body.
6. End sections with 6:1 and 4:1 slopes are available in 12" through 24" diameters.
7. Actual dimensions may vary slightly.
8. During manufacturing, a slight invert slope may result along the length of the end section to be accommodated in the field.

End Sections for Round Pipe (2-2/3" $\times 1 / 2^{\prime \prime}, 3^{\prime \prime} \times 1^{\prime \prime}$ and $5^{\prime \prime} \times 1^{\prime \prime}$ )
Approximate Dimensions, Inches ${ }^{(7)}$

| Approximate Dimensions, Inches ${ }^{(7)}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pipe Diameter | Gage | $\begin{gathered} \mathrm{A} \\ \left(+/-1^{\prime \prime}\right) \end{gathered}$ | $\begin{gathered} B \\ (\operatorname{Max}) \end{gathered}$ | $\underset{(\mathrm{Min})}{\mathrm{H}}$ | $\begin{gathered} \mathrm{L} \\ \left(+/-2^{\prime \prime}\right) \end{gathered}$ | $\begin{gathered} \text { W } \\ \left(+/-2^{\prime \prime}\right) \end{gathered}$ | Overall Width $\left(+1-4^{\prime \prime}\right)$ |
| 12 | 16 | 6 | 6 | 6 | 21 | 24 | 36 |
| 15 | 16 | 7 | 8 | 6 | 26 | 30 | 44 |
| 18 | 16 | 8 | 10 | 6 | 31 | 36 | 52 |
| 21 | 16 | 9 | 12 | 6 | 36 | 42 | 60 |
| 24 | 16 | 10 | 13 | 6 | 41 | 48 | 68 |
| 30 | 14 | 12 | 16 | 8 | 51 | 60 | 84 |
| 36 | 14 | 14 | 19 | 9 | 60 | 72 | 100 |
| 42 | 12 | 16 | 22 | 11 | 69 | 84 | 116 |
| 48 | 12 | 18 | 27 | 12 | 78 | 90 | 126 |
| 54 | 12 | 18 | 30 | 12 | 84 | 102 | 138 |
| 60 | 12/10 | 18 | 33 | 12 | 87 | 114 | 150 |
| 66 | 12/10 | 18 | 36 | 12 | 87 | 120 | 156 |
| 72 | 12/10 | 18 | 39 | 12 | 87 | 126 | 162 |
| 78 | 12/10 | 18 | 42 | 12 | 87 | 132 | 168 |
| 84 | 12/10 | 18 | 45 | 12 | 87 | 138 | 174 |

End Sections for Pipe-Arch (2-2/3" $\times 1 / 2^{\prime \prime}$ )

| Approximate Dimensions, Inches ${ }^{(7)}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Round Equivalent | Span x Rise (in.) | Gage | $\begin{gathered} \mathrm{A} \\ \left(+/-1^{\prime \prime}\right) \end{gathered}$ | $\begin{gathered} B \\ (\operatorname{Max}) \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \left(+/-l^{\prime \prime}\right) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \left(+/-2^{\prime \prime}\right) \end{gathered}$ | $\begin{gathered} \text { W } \\ \left(+/-2^{\prime \prime}\right) \end{gathered}$ | Overall Width $\left(+/-4^{\prime \prime}\right)$ |
| 15 | $17 \times 13$ | 16 | 7 | 9 | 6 | 19 | 30 | 44 |
| 18 | $21 \times 15$ | 16 | 7 | 10 | 6 | 23 | 36 | 50 |
| 21 | $24 \times 18$ | 16 | 8 | 12 | 6 | 28 | 42 | 58 |
| 24 | $28 \times 20$ | 16 | 9 | 14 | 6 | 32 | 48 | 66 |
| 30 | $35 \times 24$ | 14 | 10 | 16 | 6 | 39 | 60 | 80 |
| 36 | $42 \times 29$ | 14 | 12 | 18 | 8 | 46 | 75 | 99 |
| 42 | $49 \times 33$ | 12 | 13 | 21 | 9 | 53 | 85 | 111 |
| 48 | $57 \times 38$ | 12 | 18 | 26 | 12 | 63 | 90 | 126 |
| 54 | $64 \times 43$ | 12 | 18 | 30 | 12 | 70 | 102 | 138 |
| 60 | $71 \times 47$ | 12/10 | 18 | 33 | 12 | 77 | 114 | 150 |
| 66 | $77 \times 52$ | 12/10 | 18 | 36 | 12 | 77 | 126 | 162 |
| 72 | $83 \times 57$ | 12/10 | 18 | 39 | 12 | 77 | 138 | 174 |

## End Sections for Pipe-Arch (3" $\times 1^{\prime \prime}$ and 5" $\times 1^{\prime \prime}$ )

| Approximate Dimensions, Inches ${ }^{(7)}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Round Equivalent | Span x Rise <br> (in.) | Gage | $\begin{gathered} \mathrm{A} \\ \left(+/-1^{\prime \prime}\right) \end{gathered}$ | $\begin{gathered} B \\ (\text { Max }) \end{gathered}$ | $\begin{gathered} \mathrm{H} \\ \left(+/-1^{\prime \prime}\right) \end{gathered}$ | $\begin{gathered} \text { W } \\ \left(+/-2^{\prime \prime}\right) \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \left(+/-2^{\prime \prime}\right) \end{gathered}$ | Overall Width $\left(+/-4^{\prime \prime}\right)$ |
| 48 | $53 \times 41$ | 12 | 18 | 25 | 12 | 90 | 63 | 126 |
| 54 | $60 \times 46$ | 12 | 18 | 34 | 12 | 102 | 70 | 138 |
| 60 | $66 \times 51$ | 12/10 | 18 | 33 | 12 | 116 | 77 | 152 |
| 66 | $73 \times 55$ | 12/10 | 18 | 36 | 12 | 126 | 77 | 162 |
| 72 | $81 \times 59$ | 12/10 | 18 | 39 | 12 | 138 | 77 | 174 |
| 78 | $87 \times 63$ | 12/10 | 20 | 38 | 12 | 148 | 77 | 188 |
| 84 | $95 \times 67$ | 12/10 | 20 | 34 | 12 | 162 | 87 | 202 |
| 90 | $103 \times 71$ | 12/10 | 20 | 38 | 12 | 174 | 87 | 214 |
| 96 | $112 \times 75$ | 12/10 | 20 | 40 | 12 | 174 | 87 | 214 |

