## SnapTite PIPE LINING SYSTEMS

Since one-third of exisiting culverts are arched, Snap-Tite ${ }^{\oplus}$ again has come up with a solution: oval pipe. It has the same benefits as smooth-wall HDPE Snap-Tite ${ }^{\oplus}$, yet made for a better fit into an existing arched culvert.

The Snap-Tite ${ }^{\circledR}$ Culvert Lining System actually outperforms both the round and oval concrete and corrugated metal pipes it rehabilitates. Lightweight, flexible, durable HDPE has an indefinite service life and the Snap-Tite ${ }^{\circledR}$ culvert lining joining system assures a water-tight seal at all joints.


## SNAP-TITE ${ }^{\circledR}$ OVAL PIPE

## Flow in Lined CMP

| CMP <br> size (inches) |  | Equivalent Snap-Tite Round OD | Outside Liner Dim(in) minor major |  | Inside Liner Dim(in) minor major |  | $\begin{gathered} \text { Flow } \\ \text { Q(cfs) } \end{gathered}$ | Snap-Tite \%of flow |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 20 | 28 |  | 16.5 | 23 | 15.1 | 21.7 | 4.7 | 128\% |
| 24 | 35 | $24 "$ | 18 | 29 | 16.4 | 27.1 | 7.0 | 111\% |
| 29 | 42 | 30" | 22.5 | 36 | 20.3 | 34 | 12.5 | 121\% |
| 33 | 49 | 36" | 30 | 41 | 27.7 | 38.7 | 23.0 | 153\% |
| 38 | 57 | 42" | 34 | 48.5 | 31.3 | 45.9 | 33.8 | 152\% |
| 43 | 64 | 48" | 39 | 55.5 | 35.9 | 52.3 | 48.3 | 158\% |
| 47 | 71 | 54" | 43 | 63 | 39.5 | 59.5 | 65.0 | 165\% |
| 52 | 77 | 54" | 47 | 60 | 43.5 | 59.6 | 74.7 | 148\% |
| 57 | 83 | 63" | 52 | 72.5 | 47.9 | 68.1 | 101.2 | 160\% |
| 63 | 87 | 63 " | 58 | 67.5 | 53.9 | 63.5 | 109.1 | 141\% |

* flow is based on slope of $.1 \%$. HDPE $n=.00914 / C M P n=.024$


## Flow in Lined RCP

| RCPsize (inches) |  | Equivalent <br> Snap-Tite Round OD <br> $22^{\prime \prime}$ | Outside Liner Dim(in) minor major |  | $\begin{aligned} & \hline \text { Inside Liner Dim(in) } \\ & \text { minor } \quad \text { major } \end{aligned}$ |  | $\begin{gathered} \text { Flow } \\ \text { Q(cfs) } \end{gathered}$ | Snap-Tite \%of flow |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 19 | 30 |  | 17 | 26 | 15.6 | 24.6 | 5.8 | 97\% |
| 24 | 38 | 28" | 21 | 33.5 | 19.2 | 33.6 | 11.4 | 102\% |
| 29 | 45 | 32" | 26 | 37 | 23.9 | 34.9 | 16.4 | 91\% |
| 34 | 53 | 40" | 31 | 46 | 28.4 | 43.6 | 27.6 | 100\% |
| 38 | 60 | 42" | 34 | 48.5 | 31.3 | 45.9 | 33.8 | 89\% |
| 43 | 68 | 48" | 39 | 55.5 | 35.9 | 52.3 | 48.3 | 92\% |
| 48 | 76 | 54 " | 43 | 63 | 39.5 | 59.5 | 65.0 | 92\% |
| 53 | 83 | 63" | 48 | 75 | 44.9 | 70.2 | 95.7 | 105\% |
| 58 | 91 | 63" | 52 | 72.5 | 47.9 | 68.1 | 101.2 | 87\% |
| 63 | 98 | 63" | 58 | 67.5 | 53.9 | 63.5 | 109.1 | 76\% |

* flow is based on slope of $.1 \%$. HDPE $n=.00914 /$ concrete $n=.015$

