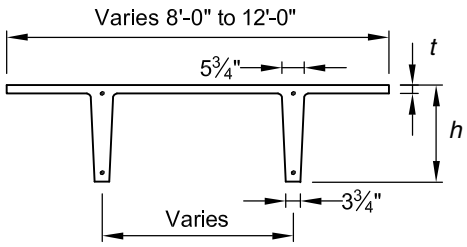
## Design Aid 3.12.3 Design Strength Interaction Curves for Precast, Prestressed Double-Tee Wall Panels




| Mark | *h*, in. | *t*, in. | No. strnd | Full interaction curve data (flange in compression) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Partially developed strand force | | | Fully developed strand force | | |
| | | | | $\phi P_o$ | $\phi P_{nb}$ | $\phi M_{nb}$ | $\phi M_c$ | $\phi P_{nb}$ | $\phi M_{nb}$ | $\phi M_c$ |
| 8DT16 | 16 | 2 | 4 | 864 | 619 | 151 | 45 | 591 | 166 | 95 |
| 8DT17 | 17 | 3 | 4 | 1129 | 872 | 178 | 48 | 844 | 195 | 103 |
| 10DT16 | 16 | 2 | 4 | 997 | 751 | 161 | 45 | 724 | 176 | 96 |
| 10DT17 | 17 | 3 | 4 | 1328 | 1071 | 187 | 48 | 1043 | 204 | 103 |
| 12DT16 | 16 | 2 | 4 | 1130 | 885 | 168 | 46 | 856 | 184 | 97 |
| 12DT17 | 17 | 3 | 4 | 1552 | 1270 | 194 | 48 | 1242 | 212 | 103 |

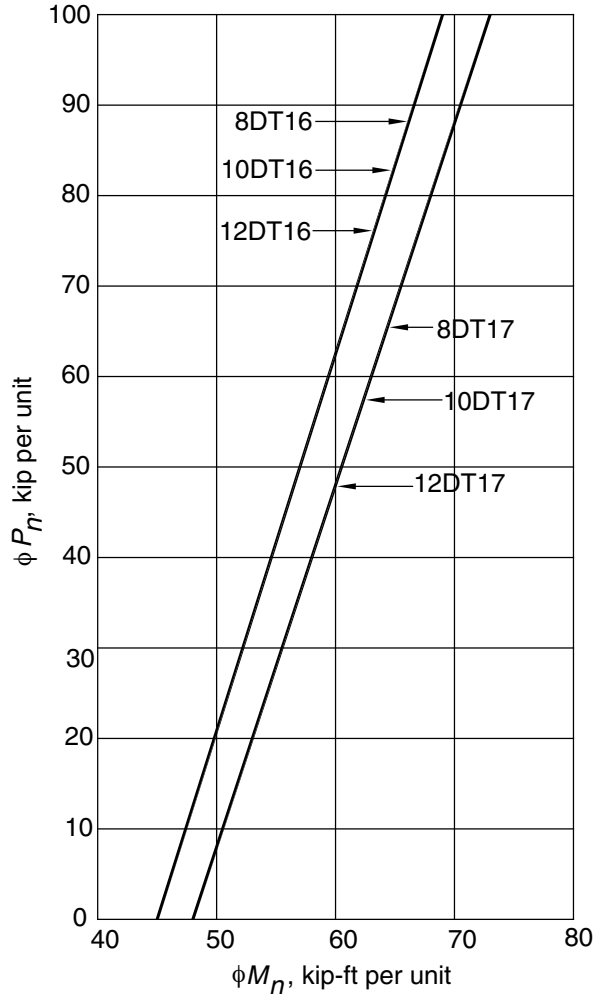
$\phi$ Varies from 0.75 to 0.65 for partially developed strand.

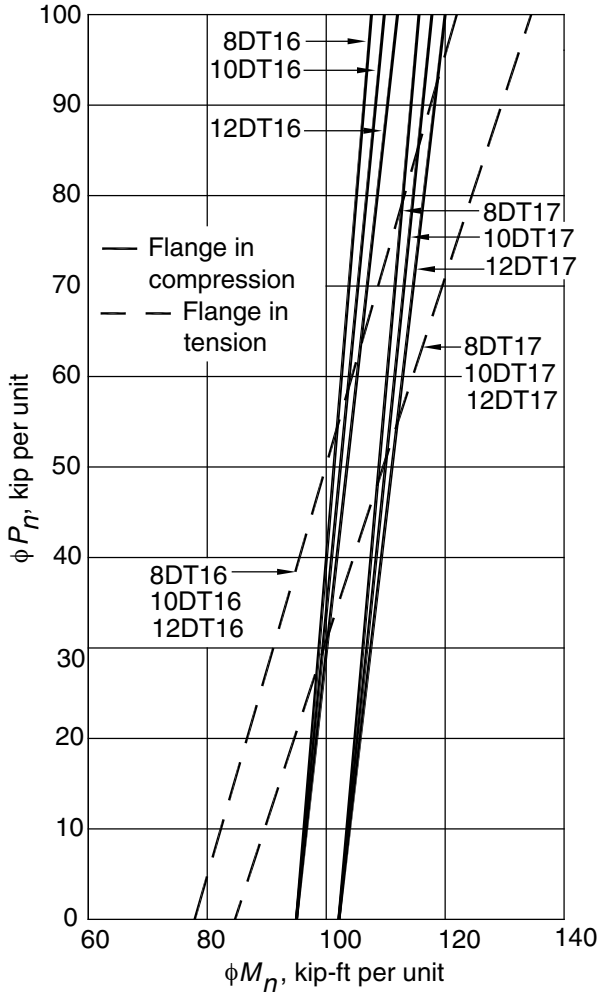
$\phi$ Varies from 0.9 to 0.65 for fully developed strand.

Values are applicable for conditions with compression in the flange and tension in the stems.

$f_c'$ = 5000 psi, normalweight
Strand = $^1/_2$ in. diameter
$f_{pu}$ = 270,000 psi

**Partially developed strand**




**Fully developed strand**