

Note to Designer:
 The information presented in this Standard Detail has been prepared in accordance with recognized engineering principles and is for general use. It should not be used for specific application without competent professional examination and verification of its suitability and applicability by a licensed professional engineer. Contents within the inner border line shall not be altered.

| NO. | DESCRIPTION OF REVISIONS | DATE | MADE BY | CHKD. BY |
|-----|--------------------------|------|---------|----------|
| 1 | Original Issue | 7-12 | | |
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| STEEL LIST | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|------|----------|------|-------|----------|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|-----------|------|-------|--|
| Mark | Bero | 90" Dia. | | | 96" Dia. | | | 102" Dia. | | | 108" Dia. | | | 114" Dia. | | | 120" Dia. | | | 126" Dia. | | | 132" Dia. | | | 138" Dia. | | | 144" Dia. | | | |
| | | No | Size | Lgth | No | Size | Lgth | No | Size | Lgth | No | Size | Lgth | No | Size | Lgth | No | Size | Lgth | No | Size | Lgth | No | Size | Lgth | No | Size | Lgth | No | Size | Lgth | |
| a1 | A | 6 | *5 | 9'-6 | 6 | *5 | 10'-0 | 6 | *5 | 10'-3 | 6 | *5 | 10'-9 | 7 | *5 | 11'-3 | 7 | *6 | 11'-9 | 7 | *5 | 12'-3 | 7 | *6 | 12'-6 | 7 | *6 | 13'-3 | 8 | *7 | 13'-6 | |
| a2 | A | 6 | *5 | 10'-0 | 6 | *5 | 10'-6 | 6 | *5 | 10'-6 | 6 | *5 | 11'-0 | 6 | *6 | 11'-9 | 7 | *6 | 12'-3 | 7 | *6 | 12'-9 | 7 | *6 | 13'-0 | 7 | *7 | 13'-9 | 7 | *7 | 14'-0 | |
| a3 | A | 5 | *5 | 10'-3 | 6 | *5 | 10'-9 | 6 | *5 | 11'-0 | 6 | *6 | 11'-6 | 6 | *6 | 12'-3 | 6 | *6 | 12'-9 | 7 | *6 | 13'-3 | 7 | *7 | 13'-6 | 7 | *7 | 14'-3 | 7 | *7 | 14'-6 | |
| a4 | A | 5 | *5 | 10'-9 | 5 | *6 | 11'-3 | 6 | *6 | 11'-6 | 6 | *6 | 12'-0 | 6 | *7 | 12'-9 | 7 | *7 | 13'-6 | 7 | *7 | 14'-0 | 7 | *7 | 14'-6 | 7 | *7 | 15'-3 | 7 | *8 | 15'-9 | |
| a5 | A | 5 | *5 | 11'-3 | 5 | *6 | 11'-9 | 6 | *6 | 12'-0 | 6 | *7 | 12'-6 | 6 | *7 | 13'-3 | 6 | *7 | 13'-6 | 6 | *7 | 14'-0 | 7 | *7 | 14'-6 | 7 | *7 | 15'-3 | 7 | *8 | 15'-9 | |
| a6 | A | 5 | *6 | 11'-6 | 5 | *6 | 12'-0 | 5 | *6 | 12'-6 | 6 | *7 | 13'-0 | 6 | *7 | 13'-9 | 6 | *7 | 14'-0 | 6 | *7 | 14'-6 | 6 | *7 | 15'-0 | 7 | *8 | 15'-9 | 7 | *8 | 16'-3 | |
| a7 | A | 5 | *6 | 12'-0 | 5 | *6 | 12'-6 | 5 | *7 | 13'-0 | 5 | *7 | 13'-6 | 6 | *7 | 14'-3 | 6 | *7 | 14'-6 | 6 | *7 | 15'-0 | 6 | *8 | 15'-6 | 7 | *8 | 16'-3 | 7 | *8 | 16'-9 | |
| a8 | A | 4 | *5 | 9'-3 | 4 | *5 | 9'-6 | 4 | *5 | 9'-9 | 5 | *5 | 10'-3 | 5 | *5 | 10'-9 | 5 | *5 | 11'-0 | 5 | *5 | 11'-3 | 5 | *5 | 11'-9 | 6 | *6 | 12'-3 | 6 | *6 | 12'-6 | |
| a9 | A | 4 | *5 | 10'-0 | 4 | *5 | 10'-3 | 4 | *5 | 10'-6 | 4 | *5 | 10'-9 | 5 | *6 | 11'-6 | 5 | *6 | 11'-9 | 5 | *6 | 12'-3 | 5 | *6 | 12'-6 | 5 | *6 | 13'-3 | 6 | *7 | 13'-6 | |
| a10 | A | 4 | *5 | 10'-6 | 4 | *5 | 11'-0 | 4 | *6 | 11'-6 | 4 | *6 | 11'-9 | 4 | *6 | 12'-3 | 5 | *7 | 12'-9 | 5 | *7 | 13'-0 | 5 | *7 | 13'-6 | 5 | *7 | 14'-0 | 5 | *7 | 14'-6 | |
| a11 | A | 3 | *6 | 11'-3 | 4 | *6 | 11'-9 | 4 | *6 | 12'-3 | 4 | *7 | 12'-6 | 4 | *7 | 13'-3 | 4 | *7 | 13'-6 | 5 | *7 | 14'-0 | 5 | *7 | 14'-3 | 5 | *7 | 15'-0 | 5 | *8 | 15'-6 | |
| a12 | A | 3 | *6 | 12'-0 | 3 | *6 | 12'-6 | 4 | *7 | 13'-0 | 4 | *7 | 13'-3 | 4 | *7 | 14'-0 | 4 | *7 | 14'-6 | 4 | *7 | 15'-0 | 5 | *8 | 15'-3 | 5 | *8 | 16'-0 | 5 | *8 | 16'-6 | |
| b1 | str | 2 | *4 | 36'-0 | 2 | *4 | 37'-6 | 2 | *4 | 39'-0 | 2 | *4 | 40'-6 | 2 | *4 | 42'-0 | 2 | *4 | 43'-6 | 2 | *4 | 45'-0 | 2 | *4 | 46'-6 | 2 | *4 | 48'-0 | 2 | *4 | 49'-6 | |
| b2 | str | 8 | *4 | 36'-0 | 10 | *4 | 37'-6 | 10 | *4 | 39'-0 | 10 | *4 | 40'-6 | 10 | *4 | 42'-0 | 12 | *4 | 43'-6 | 12 | *4 | 45'-0 | 12 | *4 | 46'-6 | 14 | *4 | 48'-0 | 14 | *4 | 49'-6 | |
| b3 | str | 2 | *4 | 32'-0 | 2 | *4 | 19'-0 | 2 | *4 | 25'-0 | 2 | *4 | 32'-0 | 2 | *4 | 37'-0 | 2 | *4 | 42'-0 | 2 | *4 | 47'-0 | 2 | *4 | 52'-0 | 2 | *4 | 57'-0 | 2 | *4 | 62'-0 | |
| b4 | str | 2 | *4 | 11'-0 | | | | 2 | *4 | 6'-0 | 2 | *4 | 13'-0 | 2 | *4 | 18'-6 | 2 | *4 | 24'-0 | 2 | *4 | 29'-6 | 2 | *4 | 35'-0 | 2 | *4 | 40'-6 | 2 | *4 | 46'-0 | |
| b5 | str | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| b6 | str | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| b7 | str | 2 | *4 | 17'-0 | 2 | *4 | 18'-0 | 2 | *4 | 19'-0 | 2 | *4 | 20'-0 | 2 | *4 | 21'-0 | 2 | *4 | 22'-0 | 2 | *4 | 23'-0 | 2 | *4 | 24'-0 | 2 | *4 | 25'-0 | 2 | *4 | 26'-0 | |
| b8 | str | 8 | *4 | 17'-0 | 8 | *4 | 18'-0 | 8 | *4 | 19'-0 | 10 | *4 | 20'-0 | 10 | *4 | 21'-0 | 10 | *4 | 22'-0 | 10 | *4 | 23'-0 | 10 | *4 | 24'-0 | 12 | *4 | 25'-0 | 12 | *4 | 26'-0 | |
| b9 | str | 2 | *4 | 12'-6 | 2 | *4 | 16'-0 | 2 | *4 | 18'-0 | 2 | *4 | 13'-0 | 2 | *4 | 16'-0 | 2 | *4 | 19'-0 | 2 | *4 | 21'-3 | 2 | *4 | 23'-6 | 2 | *4 | 19'-0 | 2 | *4 | 21'-3 | |
| b10 | str | 2 | *4 | 4'-0 | 2 | *4 | 7'-0 | 2 | *4 | 10'-6 | 2 | *4 | 4'-6 | 2 | *4 | 8'-0 | 2 | *4 | 11'-0 | 2 | *4 | 13'-0 | 2 | *4 | 15'-3 | 2 | *4 | 10'-6 | 2 | *4 | 13'-3 | |
| b11 | str | | | | | | | 2 | *4 | 1'-6 | | | | | | | | | | | | | | | | | | | | | | |
| b12 | str | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| c | str | 4 | *4 | 10'-6 | 4 | *4 | 11'-0 | 4 | *4 | 11'-6 | 4 | *4 | 12'-0 | 4 | *4 | 12'-6 | 4 | *4 | 13'-0 | 4 | *4 | 13'-6 | 4 | *4 | 14'-0 | 4 | *4 | 14'-6 | 4 | *4 | 15'-0 | |
| d | A | 6 | *6 | 12'-3 | 6 | *6 | 12'-9 | 6 | *6 | 13'-3 | 6 | *7 | 13'-9 | 6 | *7 | 14'-6 | 6 | *7 | 15'-0 | 6 | *7 | 15'-6 | 6 | *8 | 16'-0 | 6 | *8 | 16'-6 | 6 | *8 | 17'-0 | |
| e1 | C | 8 | *5 | 4'-3 | 7 | *5 | 4'-3 | 7 | *5 | 4'-6 | 7 | *5 | 4'-9 | 6 | *5 | 4'-9 | 7 | *5 | 5'-0 | 7 | *5 | 5'-3 | 7 | *6 | 5'-3 | 7 | *6 | 5'-6 | 8 | *6 | 5'-9 | |
| e2 | C | 7 | *5 | 4'-6 | 7 | *5 | 4'-6 | 7 | *5 | 4'-9 | 7 | *5 | 5'-0 | 6 | *5 | 5'-0 | 7 | *5 | 5'-3 | 7 | *6 | 5'-6 | 7 | *6 | 5'-9 | 7 | *6 | 6'-0 | 7 | *6 | 6'-3 | |
| e3 | C | 7 | *5 | 4'-9 | 6 | *5 | 4'-9 | 7 | *5 | 5'-0 | 7 | *5 | 5'-3 | 6 | *5 | 5'-3 | 6 | *6 | 5'-6 | 7 | *6 | 6'-0 | 7 | *6 | 6'-3 | 7 | *7 | 6'-6 | 7 | *7 | 7'-0 | |
| e4 | C | 7 | *5 | 5'-0 | 6 | *5 | 5'-0 | 6 | *5 | 5'-3 | 7 | *6 | 5'-6 | 6 | *6 | 5'-6 | 6 | *6 | 5'-9 | 6 | *6 | 6'-3 | 7 | *7 | 6'-6 | 7 | *7 | 7'-0 | 7 | *7 | 7'-6 | |
| e5 | C | 7 | *5 | 5'-3 | 6 | *5 | 5'-3 | 6 | *6 | 5'-6 | 7 | *6 | 5'-9 | 6 | *6 | 6'-0 | 6 | *6 | 6'-3 | 6 | *7 | 6'-6 | 6 | *7 | 7'-0 | 7 | *7 | 7'-6 | 7 | *7 | 8'-0 | |
| e6 | C | | | | 6 | *6 | 5'-6 | 6 | *6 | 5'-9 | 6 | *6 | 6'-0 | 6 | *6 | 6'-3 | 6 | *7 | 6'-6 | 6 | *7 | 7'-0 | 6 | *7 | 7'-6 | 7 | *7 | 8'-0 | 7 | *8 | 8'-6 | |
| e7 | C | | | | | | | | | | | | | 6 | *7 | 7'-3 | 6 | *7 | 7'-6 | 6 | *7 | 8'-0 | 6 | *7 | 8'-3 | 6 | *8 | 8'-6 | 7 | *8 | 9'-0 | |
| e8 | C | 2 | *5 | 5'-3 | 2 | *6 | 5'-6 | 2 | *6 | 6'-0 | 2 | *6 | 6'-3 | 2 | *7 | 6'-6 | 3 | *7 | 7'-0 | 3 | *7 | 7'-3 | 3 | *7 | 7'-6 | 3 | *8 | 8'-0 | 3 | *8 | 8'-6 | |
| e9 | C | 12 | *5 | 5'-3 | 13 | *6 | 5'-6 | 13 | *6 | 6'-0 | 14 | *6 | 6'-3 | 14 | *7 | 6'-6 | 15 | *7 | 7'-0 | 15 | *7 | 7'-3 | 16 | *7 | 7'-6 | 16 | *8 | 8'-0 | 17 | *8 | 8'-6 | |
| e10 | C | 5 | *5 | 5'-3 | 5 | *6 | 5'-6 | 5 | *6 | 6'-0 | 6 | *6 | 6'-3 | 6 | *7 | 6'-6 | 6 | *7 | 7'-0 | 6 | *7 | 7'-3 | 7 | *7 | 7'-6 | 7 | *8 | 8'-0 | 7 | *8 | 8'-6 | |
| e11 | C | 3 | *5 | 5'-3 | 3 | *5 | 5'-6 | 3 | *5 | 5'-9 | 4 | *6 | 6'-0 | 4 | *6 | 6'-3 | 4 | *6 | 6'-6 | 4 | *6 | 6'-9 | 4 | *6 | 7'-0 | 5 | *7 | 7'-3 | 5 | *7 | 7'-6 | |
| e12 | C | 3 | *5 | 5'-0 | 3 | *5 | 5'-3 | 4 | *5 | 5'-6 | 4 | *5 | 5'-9 | 4 | *6 | 6'-0 | 4 | *6 | 6'-3 | 4 | *6 | 6'-6 | 5 | *6 | 6'-9 | 5 | *6 | 7'-3 | 5 | *6 | 7'-6 | |
| e13 | C | 3 | *5 | 4'-9 | 4 | *5 | 4'-9 | 4 | *5 | 5'-0 | 4 | *5 | 5'-3 | 4 | *5 | 5'-6 | 5 | *5 | 5'-9 | 5 | *5 | 6'-0 | 5 | *5 | 6'-3 | 5 | *6 | 6'-6 | 5 | *6 | 6'-9 | |
| e14 | C | 4 | *5 | 4'-6 | 4 | *5 | 4'-6 | 4 | *5 | 4'-9 | 4 | *5 | 5'-0 | 4 | *5 | 5'-3 | 5 | *5 | 5'-6 | 5 | *5 | 5'-9 | 5 | *5 | 6'-0 | 5 | *5 | 6'-3 | 5 | *5 | 6'-6 | |
| e15 | C | 4 | *5 | 4'-3 | 4 | *5 | 4'-3 | 4 | *5 | 4'-6 | 4 | *5 | 4'-9 | 5 | *5 | 5'-0 | 5 | *5 | 5'-3 | 5 | *5 | 5'-6 | 5 | *5 | 5'-9 | 5 | *5 | 6'-0 | 6 | *5 | 6'-3 | |
| f1 | str | 6 | *4 | 7'-9 | 7 | *4 | 8'-0 | 7 | *4 | 8'-6 | 7 | *4 | 9'-0 | 7 | *4 | 9'-3 | 8 | *4 | 9'-9 | 8 | *4 | 10'-3 | 8 | *4 | 10'-6 | 8 | *4 | 11'-0 | 9 | *4 | 11'-6 | |
| f2 | str | 6 | *4 | 8'-6 | 6 | *4 | 8'-9 | 7 | *4 | 9'-3 | 7 | *4 | 9'-9 | 7 | *4 | 10'-0 | 7 | *4 | 10'-6 | 8 | *4 | 11'-0 | 8 | *4 | 11'-6 | 8 | *4 | 11'-9 | 8 | *4 | 12'-3 | |
| f3 | str | 6 | *4 | 9'-3 | 6 | *4 | 9'-6 | 6 | *4 | 10'-0 | 7 | *4 | 10'-6 | 7 | *4 | 11'-0 | 7 | *4 | 11'-6 | 7 | *4 | 12'-0 | 8 | *4 | 12'-3 | 8 | *4 | 12'-9 | 8 | *4 | 13'-3 | |
| f4 | str | 6 | *4 | 10'-0 | 6 | *4 | 10'-6 | 6 | *4 | 11'-3 | 7 | *4 | 11'-9 | 7 | *4 | 12'-3 | 7 | *4 | 12'-9 | 7 | *4 | 13'-3 | 8 | *4 | 13'-6 | 8 | *4 | 14'-0 | 8 | *4 | 14'-6 | |
| f5 | str | 3 | *4 | 7'-3 | 3 | *4 | 7'-9 | 4 | *4 | 8'-0 | 4 | *4 | 8'-6 | 4 | *4 | 9'-0 | 4 | *4 | 9'-6 | 4 | *4 | 10'-0 | 4 | *4 | 10'-6 | 5 | *4 | 11'-0 | 5 | *4 | 11'-6 | |
| f6 | str | 3 | *4 | 8'-3 | 3 | *4 | 8'-9 | 3 | *4 | 9'-0 | 4 | *4 | 9'-6 | 4 | *4 | 10'-0 | 4 | *4 | 10'-6 | 4 | *4 | 11'-0 | 4 | *4 | 11'-6 | 5 | *4 | 12'-0 | 5 | *4 | 12'-6 | |
| f7 | str | 3 | *4 | 9'-0 | 3 | *4 | 9'-6 | 3 | *4 | 10'-0 | 3 | *4 | 10'-6 | 3 | *4 | 11'-0 | 4 | *4 | 11'-6 | 4 | *4 | 12'-0 | 4 | *4 | 12'-6 | 4 | *4 | 13'-0 | 4 | *4 | 13'-6 | |
| f8 | str | 3 | *4 | 10'-0 | 3 | *4 | 10'-6 | 3 | *4 | 11'-0 | 3 | *4 | 11'-6 | 3 | *4 | 12'-0 | 3 | *4 | 12'-6 | 4 | *4 | 13'-0 | 4 | *4 | 13'-6 | 4 | *4 | 14'-0 | 4 | *4 | 14'-6 | |
| g | str | 6 | *4 | 11'-6 | 6 | *4 | 12'-3 | 6 | *4 | 12'-9 | 6 | *4 | 13'-6 | 6 | *4 | 14'-3 | 6 | *4 | 15'-0 | 6 | *4 | 15'-6 | 6 | *4 | 16'-3 | 6 | *4 | 17'-0 | 6 | *4 | 17'-6 | |
| m1 | str | 4 | *4 | 37'-9 | 4 | *4 | 39'-3 | 4 | *4 | 40'-9 | 5 | *4 | 42'-6 | 5 | *4 | 44'-0 | 5 | *4 | 45'-6 | 5 | *4 | 47'-0 | 6 | *4 | 48'-6 | 6 | *4 | 50'-3 | 6 | *4 | 51'-9 | |
| m2 | str | 1 | *4 | 37'-9 | 1 | *4 | 39'-3 | 1 | *4 | 40'-9 | 1 | *4 | 42'-6 | 1 | *4 | 44'-0 | 1 | *4 | 45'-6 | 1 | *4 | 47'-0 | 1 | *4 | 48'-6 | 1 | *4 | 50'-3 | 1 | *4 | 51'-9 | |
| m3 | str | 4 | *4 | 22'-3 | 4 | *4 | 23'-6 | 4 | *4 | 24'-9 | 5 | *4 | 26'-3 | 5 | *4 | 27'-6 | 5 | *4 | 28'-9 | 5 | *4 | 30'-0 | 6 | *4 | 31'-3 | 6 | *4 | 32'-9 | 6 | *4 | 34'-0 | |
| m4 | str | 1 | *4 | 22'-3 | 1 | *4 | 23'-6 | 1 | *4 | 24'-9 | 1 | *4 | 26'-3 | 1 | | | | | | | | | | | | | | | | | | |