## Light and Medium Framing Angle

CDFA's provide fast, accurate bolting of two intersecting wood members (reinforcing intersection joints). Versatile angles that are nailed to reinforce intersecting wood members. Medium angles are designed for standardization and construction economies.

## MATERIAL SPECIFICATIONS

Gauge: 18ga (43mil)
Design Thickness: 0.0451 inches

Gauge: 12ga (97mil)
Design Thickness: 0.1017 inches

Coating: G90 (Z275) hot-dipped galvanized coating
Yield Strength: Structural Grade 50 Type H (ST50H), 50ksi ( 340 MPa )


## CODE REPORT

- ICC-ES ESR-5079
(CDFA24 and CDFA311 excluded from ESR-5079)


## Light and Medium Framing Angle (CDFA)

| Product Code | Connection |  | Gauge | Dimensions ${ }^{3}$ |  |  | Fasteners Scheduling |  |  | $\begin{aligned} & \text { LOAD }^{6} \\ & \text { DIR. } \end{aligned}$ | Allowable Load (Ibf) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qty. | Type ${ }^{4}$ |  | W | L1 | L2 | Type ${ }^{5}$ | Plate <br> Qty. | Stud Qty. |  | $C_{D}=1.00$ | $C_{D}=1.15$ | $C_{D}=1.25$ | $C_{D}=1.60$ |
| CDFA21 | 1 | S-to-P | 18 | 1-3/8" | 2-1/16" | 1-37/64" | $10 \mathrm{~d} \times 1-1 / 2$ | 2 | 2 | $F_{1}$ | 200 | 200 | 200 | 200 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 110 | 110 | 110 | 110 |
| CDFA23 | 1 | S-to-P | 18 | 2-3/4" | 2-1/16" | 1-37/64" | $10 \mathrm{~d} \times 1-1 / 2$ | 4 | 4 | $\mathrm{F}_{1}$ | 395 | 395 | 395 | 395 |
|  |  |  |  |  |  |  |  |  |  | $F_{2}$ | 210 | 210 | 210 | 210 |
| CDFA33 | 1 | C-to-B | 12 | 1-1/2" | 3-7/32" | 3-1/16" | 10d $\times 3.0$ | 4 | 4 | $F_{1}$ | 580 | 580 | 580 | 580 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 255 | 255 | 255 | 255 |
| CDFA44 | 1 | C-to-B | 12 | 1-3/16" | 4-15/32" | 4-15/32" | 10d $\times 3.0$ | 4 | 4 | $\mathrm{F}_{1}$ | 500 | 500 | 500 | 500 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 260 | 260 | 260 | 260 |
| CDFA66 | 1 | C-to-B | 12 | 1-1/5" | $6{ }^{\prime \prime}$ | $6 "$ | $10 \mathrm{~d} \times 3.0$ | 3 | 3 | $\mathrm{F}_{1}$ | 445 | 445 | 445 | 445 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 160 | 160 | 160 | 160 |
| CDFA88 | 1 | C-to-B | 12 | $2 "$ | 8-1/8" | 8-1/8" | 10d $\times 3.0$ | 4 | 4 | $F_{1}$ | 490 | 490 | 490 | 490 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 180 | 180 | 180 | 180 |

Notes:
For $\mathrm{SI}: 1$ inch $=25.4 \mathrm{~mm}, 1$ pound $(\mathrm{lb})=4.45 \mathrm{~N}$
1 The tabulated allowable loads have been adjusted for the load duration factors, $C_{D}$, as shown, in accordance with the NDS. The tabulated allowable loads do not apply to loads of other load durations, and are not allowed to be adjusted for other load durations. See Sections 4.1 and 4.2 of ESR-5079 for additional design and installation requirements.
2 The tabulated allowable loads are for installations on wood members complying with Section 3.2.2 of the ESR-5079 report.
3 See images for hanger dimension definitions of $\mathrm{W}, \mathrm{L} 1$ and L 2 .
4 Connection type: S-to-P = Stud-to-Plate, C-to-B = Column-to-Beam.
5 Refer to Section 3.2.3 of ESR-5079 for nail actual sizes and the required minimum physical properties. $\mathrm{R}_{\text {HF }}$
$6 F_{1}$ is the load parallel to the plate and $F_{2}$ is the load perpendicular to the plate.

## Light and Medium Framing Angle (CDFA)

| Product Code | Connection |  | Gauge | Dimensions ${ }^{3}$ |  |  | Fasteners Scheduling |  |  | LOAD DIR. | Allowable Load (lbf) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qty. | Type ${ }^{4}$ |  | W | L1 | L2 | Type ${ }^{5}$ | $\begin{aligned} & \text { Plate } \\ & \hline \text { Qty. } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { Stud } \\ & \text { Qty. } \end{aligned}$ |  | $C_{D}=1.00$ | $C_{D}=1.15$ | $C_{D}=1.25$ | $C_{D}=1.60$ |
| CDFA21 | 1 | S-to-P | 18 | 1-3/8" | 2-1/16" | 1-37/64" | \#9-15 x 1-1/2 | 2 | 2 | $\mathrm{F}_{1}$ | 350 | 350 | 350 | 350 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 230 | 230 | 230 | 230 |
| CDFA23 | 1 | S-to-P | 18 | 2-3/4" | 2-1/16" | 1-37/64" | \#9-15 x 1-1/2 | 4 | 4 | $\mathrm{F}_{1}$ | 545 | 545 | 545 | 545 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 420 | 420 | 420 | 420 |
| CDFA33 | 1 | C-to-B | 12 | 1-1/2" | 3-7/32" | 3-1/16" | \#9-15 × 3.0 | 4 | 4 | $\mathrm{F}_{1}$ | 530 | 530 | 530 | 530 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 290 | 290 | 290 | 290 |
| CDFA44 | 1 | C-to-B | 12 | 1-3/16" | 4-15/32" | 4-15/32" | \#9-15 × 3.0 | 4 | 4 | $\mathrm{F}_{1}$ | 420 | 420 | 420 | 420 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 260 | 260 | 260 | 260 |
| CDFA66 | 1 | C-to-B | 12 | 1-1/5" | $6 "$ | $6 "$ | \#9-15 × 3.0 | 3 | 3 | $\mathrm{F}_{1}$ | 265 | 265 | 265 | 265 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 170 | 170 | 170 | 170 |
| CDFA88 | 1 | C-to-B | 12 | $2 "$ | 8-1/8" | 8-1/8" | \#9-15 x 3.0 | 4 | 4 | $\mathrm{F}_{1}$ | 345 | 345 | 345 | 345 |
|  |  |  |  |  |  |  |  |  |  | $\mathrm{F}_{2}$ | 250 | 250 | 250 | 250 |

## Notes:

For SI: 1 inch $=25.4 \mathrm{~mm}, 1$ pound $(\mathrm{Ib})=4.45 \mathrm{~N}$
1 The tabulated allowable loads have been adjusted for the load duration factors, $C_{D}$, as shown, in accordance with the NDS. The tabulated allowable loads do not apply to loads of other load durations, and are not allowed to be adjusted for other load durations. See Sections 4.1 and 4.2 of ESR-5079 for additional design and installation requirements.
2 The tabulated allowable loads are for installations on wood members complying with Section 3.2.2 of the ESR-5079 report.
3 See images for hanger dimension definitions of W, L1 and L2.
4 Connection type: S-to-P = Stud-to-Plate, C-to-B = Column-to-Beam.
5 ITW Buildex Trugrip metal-to-wood screws. Refer to www.itwbuildex.com for the required physical properties.
$6 F_{1}$ is the load parallel to the beam and $F_{2}$ is the load perpendicular to the beam.


CDFA44


CDFA66




