

Application and Selection

Applications:

Junction boxes, designed for hazardous and non-hazardous locations, are used in a variety of industries to perform the following functions:

- As a pull box
- To provide enclosures for splices and taps
- As a mounting box for multi-device control stations
- For housing apparatus, instruments, and other devices

Considerations for Selection:

- Environmental location – the physical location of the junction box will call for proper construction of the box to meet National Electrical Code requirements and will affect the material and finish needed to meet weather and corrosive conditions, if present.
- Number and size of conductors – combined with the function to be performed (i.e., splicing, pull box), determines the amount of space needed, and therefore, the required physical dimensions of the box.
- Conduit layout – determines the number, size, and location of the conduit openings in the box. It will also determine the type of mounting required (i.e., flush or surface positioning of the box).
- Flexibility required – if changes in the electrical system are anticipated, the box chosen should be easily adaptable, either by construction or size to the future system.

Options and Accessories:

A wide variety of options and accessories for special application are available for the various junction box families. These can be selected once the type of junction box has been determined. These options are shown on the individual pages. Some of the options available include:

- Special covers
- Hinged covers
- Materials and finishes
- Equipment mounting plates
- Conduit or device openings
- *Corro-free*™ epoxy powder coat – information available on request

CP

Quick Selector Chart

Junction Boxes	Environmental Capability/Type Designation	Size Range† L, W, D Inside	Max. Conduit Opening Size	Mtg.	Cover Type	Cover Material
WAB	Raintight/Type 3, 4 Dust-tight/Type 12	4 x 4 x 2 to 72 x 30 x 16	5	Surface	Unflanged	Steel
WCB	Raintight/Type 3, Watertight/Type 4, Dust-tight/Type 12	4 x 4 x 2 to 72 x 30 x 16	5	Surface	Overlapping	Cast iron
WJB	Raintight/Type 3, Watertight/Type 4	4 x 4 x 3 to 72 x 30 x 16	6	Surface	Flanged	Steel
WJBF	Raintight/Type 3, Watertight/Type 4	4 x 4 x 4 to 72 x 30 x 16	6	Flush	External flanged recessed sidewalk	Steel (checkered)
WEB	Raintight/Type 3	4 x 4 x 3 to 36 x 36 x 12	6	Flush	Internal Flanged	Steel

†Length and width are inside dimensions. Depth is inside dimension without cover.

Drilled and Tapped Conduit Openings or Slip Holes:

All W-Series cast-iron junction boxes may be ordered with drilled and tapped conduit openings or slip holes - subject to minimum spacing limitations.

To order a box from the factory with conduit openings, consult factory.

WJBF Checkered Cover Sidewalk Junction Boxes

Heavy Duty
External Flanged for Flush Mounting

Weatherproof
Watertight
Raintight
NEMA 3, 4, 5
Cl. II, Groups E, F, G
Cl. III



Applications:

WJBF boxes are primarily designed for surface mounting. WJBF heavy duty junction boxes are installed in conduit systems to:

- Act as pull box for conductors
- Provide openings and space for making splices and taps in conductors
- Provide for branch conduit runs
- Provide access to conductors for maintenance and future system changes
- Enclose and protect electrical equipment

Features:

- Covers are suitable for vehicular traffic (H20 loading)
- Neoprene gasket cemented to cover
- Wide range of drilled and tapped conduit entrance sizes and locations permits extreme flexibility of use in conduit system
- Internal equipment mounting pads may be drilled and tapped for 1/4" - 20 mounting screws
- Blind tapped into internal mounting pads
- Mounting straps are standard on smaller sized boxes up to 8x8x6, for larger sizes consult factory

Certifications and Compliances:

- CSA Standard C22.2 No. 25
- Weatherproof
- Watertight
- NEMA 3, 4, 5
- NEMA 250
- CEC:
 - Class II, Division 1, Groups E, F, G
 - Class III
 - Encl. 3, 4, 5
- H20 Vehicle Load Rating*

*Self certify to H20 vehicle load rating equivalent to 16,000 lbs. on cover center.

Standard Materials:

- Feraloy® iron alloy body
- Heavy-gauge steel (checkered) - cover, mounting straps
- Neoprene gaskets
- Stainless steel cover screws

Standard Finishes:

- Feraloy iron alloy and heavy-gauge steel - hot-dip galvanized

Options:

Description

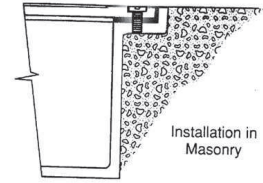
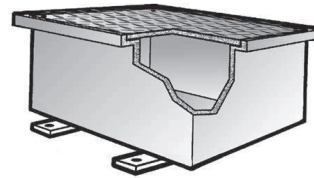
Factory installed mounting plate
Material - all sizes, cast aluminum
Drilled and tapped conduit holes and slip holes available, Consult Factory

Suffix

MP
SA

Size Ranges:

- 4" x 4" x 2" to 72" x 30" x 16"



Ordering Information:

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)
WJBF040404	1/4	4	4	4
WJBF060404	1/4	6	4	4
WJBF060604	1/4	6	6	4
WJBF060606	1/4	6	6	6
WJBF080604	1/4	8	6	4
WJBF080606	1/4	8	6	6
WJBF080804	1/4	8	8	4
WJBF080806	1/4	8	8	6
WJBF080808	1/4	8	8	8
WJBF100806	1/4	10	8	6
WJBF100808	1/4	10	8	8
WJBF101006	1/4	10	10	6
WJBF101008	1/4	10	10	8
WJBF120606	1/4	12	6	6
WJBF120806	1/4	12	8	6
WJBF120808	1/4	12	8	8
WJBF120810	5/16	12	8	10
WJBF121206	1/4	12	12	6
WJBF121208	1/4	12	12	8
WJBF121212	5/16	12	12	12
WJBF121218	5/16	12	12	18
WJBF140806	1/4	14	8	6
WJBF141410	5/16	14	14	10
WJBF161206	1/4	16	12	6
WJBF161208	1/4	16	12	8
WJBF161606	1/4	16	16	6
WJBF180806	1/4	18	8	6
WJBF180808	1/4	18	8	8
WJBF181006	5/16	18	10	6
WJBF181206	5/16	18	12	6
WJBF181208	5/16	18	12	8
WJBF181210	3/8	18	12	10
WJBF181212	5/16	18	12	12
WJBF181218	3/8	18	12	18
WJBF181806	3/8	18	18	6
WJBF181808	3/8	18	18	8
WJBF181812	3/8	18	18	12
WJBF181818	3/8	18	18	18
WJBF241208	3/8	24	12	8
WJBF241212	3/8	24	12	12
WJBF241808	3/8	24	18	8
WJBF241810	3/8	24	18	10
WJBF241812	3/8	24	18	12
WJBF241818	3/8	24	18	18
WJBF242412	3/8	24	24	12
WJBF242418	3/8	24	24	18
WJBF242424	3/8	24	24	24
WJBF302412	3/8	30	24	12
WJBF302418	3/8	30	24	18
WJBF362418	3/8	36	24	18
WJBF362424	3/8	36	24	24

Larger sizes available up to 72" x 30" x 16" - Consult Factory

WJB Junction Boxes

Heavy Duty Flanged for Surface Mounting

Weatherproof
Watertight
Raintight
NEMA 3, 4, 5
Cl. II, Groups E, F, G
Cl. III



Applications:

WJB boxes are primarily designed for surface mounting. WJB heavy duty junction boxes are installed in conduit systems to:

- Act as pull box for conductors
- Provide openings and space for making splices and taps in conductors
- Provide for branch conduit runs
- Provide access to conductors for maintenance and future system changes
- Enclose and protect electrical equipment

Features:

- Covers are suitable for vehicular traffic (H2O loading)
- Neoprene cover gasket.
- Wide range of drilled and tapped conduit entrance sizes and locations permits extreme flexibility of use in conduit system.
- Internal equipment mounting pads may be drilled and tapped for 1/4" – 20 mounting screws.
- Blind tapped into internal mounting pads.
- Mounting straps are standard on smaller sized boxes up to 8x8x6, for larger sizes consult factory

Certifications and Compliances:

- CSA Standard C22.2 No. 25
- Weatherproof
- Watertight*
- NEMA 3, 4, 5
- NEMA 250
- CEC:
 - Class II, E, F, G
 - Class III
 - Encl. 3, 4, 5
- H2O Vehicle Load Rating

Standard Materials:

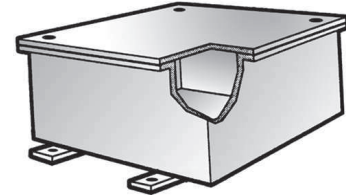
- *Feraloy*® iron alloy body
- Heavy-gauge steel – cover and mounting straps
- Neoprene gaskets
- Stainless steel cover screws

Standard Finishes:

- *Feraloy* iron alloy and heavy-gauge steel – hot-dip galvanized

Options:

Description **Suffix**
 Factory installed mounting plate **MP**
 Material - all sizes, cast aluminum **SA**
 Drilled and tapped conduit holes and
 slip holes available, Consult Factory



Ordering Information:

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)
WJB040403	1/4	4	4	3
WJB040404	1/4	4	4	4
WJB060404	1/4	6	4	4
WJB060604	1/4	6	6	4
WJB060606	1/4	6	6	6
WJB080604	1/4	8	6	4
WJB080606	1/4	8	6	6
WJB080804	1/4	8	8	4
WJB080806	1/4	8	8	6
WJB080808	1/4	8	8	8
WJB100806	1/4	10	8	6
WJB100808	1/4	10	8	8
WJB101006	1/4	10	10	6
WJB101008	1/4	10	10	8
WJB120606	1/4	12	6	6
WJB120806	1/4	12	8	6
WJB120808	1/4	12	8	8
WJB120810	1/4	12	8	10
WJB121206	5/16	12	12	6
WJB121208	5/16	12	12	8
WJB121212	5/16	12	12	12
WJB121218	5/16	12	12	18
WJB140806	5/16	14	8	6
WJB141410	5/16	14	14	10
WJB161206	5/16	16	12	6
WJB161208	5/16	16	12	8
WJB161606	5/16	16	16	6
WJB180806	5/16	18	8	6
WJB180808	5/16	18	8	8
WJB181006	5/16	18	10	6
WJB181206	5/16	18	12	6
WJB181208	5/16	18	12	8
WJB181210	5/16	18	12	10
WJB181212	5/16	18	12	12
WJB181218	5/16	18	12	18
WJB181806	3/8	18	18	6
WJB181808	3/8	18	18	8
WJB181812	3/8	18	18	12
WJB181818	3/8	18	18	18
WJB241208	3/8	24	12	8
WJB241212	3/8	24	12	12
WJB241808	3/8	24	18	8
WJB241810	3/8	24	18	10
WJB241812	3/8	24	18	12
WJB241818	9/16	24	18	18
WJB242412	9/16	24	24	12
WJB242418	9/16	24	24	18
WJB242424	9/16	24	24	24
WJB302412	9/16	30	24	12
WJB302418	9/16	30	24	18
WJB362418	9/16	36	24	18
WJB362424	9/16	36	24	24

Larger sizes available up to 72" x 30" x 16" - Consult Factory

Size Ranges:

- 4" x 4" x 2" to 72" x 30" x 16"

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WAB Junction Boxes

Dust-tight
Weatherproof
NEMA 3, 4, 12

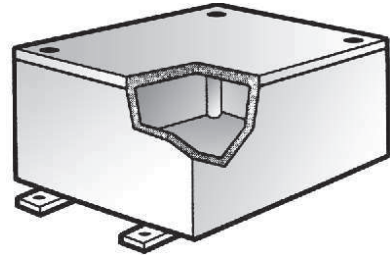


Heavy Duty Unflanged for Surface Mounting

Applications:

Where a heavy duty dustproof, weatherproof enclosure is desired, WAB boxes are installed in conduit system to:

- Act as pull box for conductors
- Provide openings and space for making splices and taps in conductors
- Provide for branch conduit runs
- Provide access to conductors for maintenance and future system changes
- Enclose and protect electrical devices



Ordering Information:

Features:

- Flat neoprene cover gasket.
- Wide range of drilled and tapped and slip hole conduit entrance sizes and locations permits extreme flexibility of use in conduit system.
- Internal equipment mounting pads available blind tapped for 1/4" - 20 mounting screws.
- Blind tapped into internal mounting pads.
- Mounting straps are standard on smaller sized boxes up to 8x8x6, for larger sizes consult factory

Certifications and Compliances:

- Dust-tight
- Weatherproof
- NEMA 3, 4, 12
- NEMA 250

Standard Materials:

- Feraloy® iron alloy body
- Heavy-gauge steel cover
- Neoprene gaskets
- Stainless steel cover screws
- Steel mounting straps

Standard Finishes:

- Feraloy iron alloy and heavy gauge steel - hot dip galvanized

Options:

Description

Factory installed mounting plate
Material - all sizes, cast aluminum
Drilled and tapped conduit holes and
slip holes available, Consult Factory

Suffix
MP
SA

Size Ranges:

- 4" x 4" x 2" to 72" x 30" x 16"

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)
WAB040402	5/32	4	4	2
WAB040403	3/16	4	4	3
WAB040404	1/4	4	4	4
WAB050503	1/4	5	5	3
WAB050504	1/4	5	5	4
WAB060403	1/4	6	4	3
WAB060404	7/32	6	4	4
WAB060603	1/4	6	6	3
WAB060604	3/16	6	6	4
WAB060606	9/32	6	6	6
WAB080403	5/16	8	4	3
WAB080604	7/32	8	6	4
WAB080606	5/16	8	6	6
WAB080804	5/16	8	8	4
WAB080806	5/16	8	8	6
WAB080808	5/16	8	8	8
WAB090604	5/16	9	6	4
WAB100604	1/4	10	6	4
WAB100804	1/4	10	8	4
WAB100806	9/32	10	8	6
WAB101006	1/4	10	10	6
WAB120604	9/32	12	6	4
WAB120606	9/32	12	6	6
WAB120806	9/32	12	8	6
WAB120808	3/8	12	8	8
WAB121204	9/32	12	12	4
WAB121206	9/32	12	12	6
WAB121208	9/32	12	12	8
WAB160606	1/4	16	6	6
WAB161208	5/16	16	12	8
WAB181206	5/16	18	12	6
WAB181208	5/16	18	12	8
WAB181210	3/8	18	12	10
WAB181806	3/8	18	18	6
WAB181812	7/16	18	18	12
WAB241212*	7/16	24	12	12
WAB242408*	11/32	24	24	8

*NEMA 3 only. For NEMA 4 in these sizes, use WCB
Larger sizes available up to 72" x 30" x 16" - Consult Factory

WCB Junction Boxes

Heavy Duty Overlapping Cover for Surface Mounting

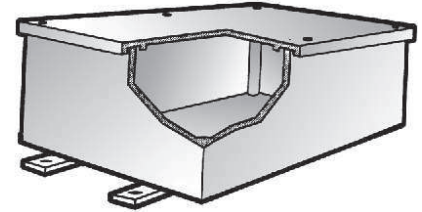
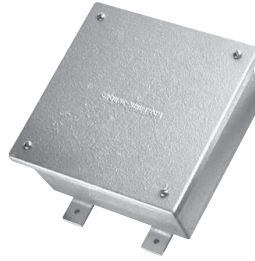
Dust-tight
Weatherproof
Watertight
Raintight
NEMA 3, 4, 12



Applications:

Where a heavy duty dust-tight, weatherproof, raintight, or watertight enclosure is desired, WCB boxes are installed in conduit systems to:

- Act as pull box for conductors
- Provide openings and space for making splices and taps in conductors
- Provide for branch conduit runs
- Provide access to conductors for maintenance and future system changes
- Enclose and protect electrical devices



Features:

- Flat neoprene cover gasket.
- Overlapping cover sheds environment.
- Wide range of drilled and tapped and slip hole conduit entrance sizes and locations permits maximum flexibility of use in conduit system.
- Internal equipment mounting pads available blind tapped for 1/4" – 20 mounting screws.
- Blind tapped into internal mounting pads.
- Mounting straps are standard on smaller sized boxes up to 8x8x6, for larger sizes consult factory

Certifications and Compliances:

- Dust-tight
- Weatherproof
- Raintight
- Watertight
- NEMA 3, 4, 12
- NEMA 250

Standard Materials:

- *Feraloy*[®] iron alloy cover and body
- Neoprene gaskets
- Stainless steel cover screws
- Steel mounting straps

Standard Finishes:

- *Feraloy* iron alloy – hot dip galvanized

Ordering Information:

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)
WCB040402	5/32	4	4	2
WCB040403	3/16	4	4	3
WCB040404	1/4	4	4	4
WCB050503	1/4	5	5	3
WCB050504	1/4	5	5	4
WCB060403	1/4	6	4	3
WCB060404	7/32	6	4	4
WCB060603	1/4	6	6	3
WCB060604	3/16	6	6	4
WCB060606	9/32	6	6	6
WCB080403	5/16	8	4	3
WCB080604	7/32	8	6	4
WCB080606	5/16	8	6	6
WCB080804	5/16	8	8	4
WCB080806	5/16	8	8	6
WCB080808	5/16	8	8	8
WCB090604	5/16	9	6	4
WCB100604	1/4	10	6	4
WCB100804	1/4	10	8	4
WCB100806	9/32	10	8	6
WCB101006	1/4	10	10	6
WCB120604	9/32	12	6	4
WCB120606	9/32	12	6	6
WCB120806	9/32	12	8	6
WCB120808	3/8	12	8	8
WCB121204	9/32	12	12	4
WCB121206	9/32	12	12	6
WCB121208	9/32	12	12	8
WCB160606	1/4	16	6	6
WCB161208	5/16	16	12	8
WCB181206	5/16	18	12	6
WCB181208	5/16	18	12	8
WCB181210	3/8	18	12	10
WCB181806	3/8	18	18	6
WCB181812	7/16	18	18	12
WCB241212	7/16	24	12	12
WCB242408	11/32	24	24	8

Larger sizes available up to 72" x 30" x 16" - Consult Factory

Options:

Description	Suffix
Factory installed mounting plate	MP
Material - all sizes, cast aluminum	SA
Drilled and tapped conduit holes and slip holes available, Consult Factory	

Size Ranges:

- 4" x 4" x 2" to 72" x 30" x 16"

WEB Junction Box

Heavy Duty

Internal Recess Flange

for Flush Mounting

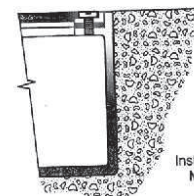
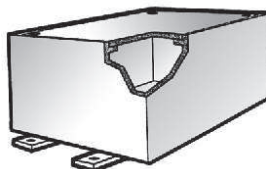
Dust-tight
Raintight
NEMA 3



Applications:

WEB Junction Boxes are installed:

- Where a heavy duty, dust-tight or raintight enclosure is desired
- To act as pull box for conductors
- To provide openings and space for making splices and taps in conductors
- To provide for branch conduit runs
- To provide access to conductors for maintenance and future system changes
- To enclose and protect electrical devices



Ordering Information:

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)
WEB040403	7/32	4	4	3
WEB040404	1/4	4	4	4
WEB060604	9/32	6	6	4
WEB060606	1/4	6	6	6
WEB080804	9/32	8	8	4
WEB080806	1/4	8	8	6
WEB121206	9/32	12	12	6
WEB160606	9/32	16	6	6
WEB160806	1/4	16	8	6
WEB180808	5/16	18	8	8
WEB240606	9/32	24	6	6
WEB240808	5/16	24	8	8
WEB241010	3/8	24	10	10
WEB241210	5/16	24	12	10
WEB241212	5/16	24	12	12
WEB241812	3/8	24	18	12
WEB361212	3/8	36	12	12
WEB361812	3/8	36	18	12
WEB362412	7/16	36	24	12
WEB363612	7/16	36	36	12

Features:

- Flat neoprene cover gasket
- Internal equipment mounting pads
- Stainless steel cover screws
- Internal ground screw

Certifications and Complies:

- NEMA 250
- NEMA 3

Standard Materials:

- Feraloy® iron alloy body, hot dip galvanized
- Heavy-gauge steel cover, hot dip galvanized
- Stainless steel cover screws
- Neoprene gaskets

Options:

Description

All boxes are available with optional mounting plate
Material - all sizes, cast aluminum
Drilled and tapped conduit holes and slip holes available, Consult Factory

Suffix

MP
SA

CP