## Installation Instructions

For doors 18 in [ 457 mm ] to 36 in [ 914 mm ] wide

## Crowder Frame System

- Crowder Frame is a complete pocket door kit system that includes roll-formed steel uprights, to build the pocket for 2 X 4 wall construction
- The complete Crowder Frame kit provides quicker and easier installation than a traditional pocket built on-site
- Cycle tested up to 150,000 times
- Up to 125 lbs. [ 56 kg ] doors
- This installation instruction is suitable for doors 18 in [ 457 mm ] to 36 in [ 914 mm ] wide and 80 in [2032 mm] to 96 in [ 2438 mm ] high and $13 / 8$ in [ 34.9 mm ] to $13 / 4$ in [ 44.5 mm ] thick
- For double/bi-parting doors, use two single door kits with CPD-2X4-Joiner Kit accordingly, refer to installation instructions CPD-2X4-Joiner Kit
- Complete with C-1200 Guide system
- It is strongly recommended to use edge pulls or door locks with integrated edge pulls and flush pulls for easy operation of pocket doors, visit http://www.kncrowder.com/doorlocks-pulls/ for options
- KN Crowder recommends: C-90L-ET privacy lockset, C-90L-CT security lockset or C-91-BB passage set


Complete Type B kit illustrated.
Framing by others.


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## Parts' List



CP-803 Header Track x (length options listed below)
For Type B for doors up to 36 in [ 914 mm ] wide:
(1) piece $\times 735 / 8$ in [ 1870 mm ]


CP-830 Drywall Support x
(quantity and length options listed below)
For Type B for doors up to 36 in [ 914 mm ] wide:
(2) pieces $\times 35 \mathbf{1 / 2}$ in [ 902 mm ]


Steel uprights (quantity and part number options listed below)


For Type B for doors up to 36 in [ 914 mm ] wide $\times 84$ in [2134 mm ]/2150 mm high:
(4) CP-807 steel upright ( 89 15/16 in [ 2284 mm ] long)

For Type B-EXH8 for doors up to 36 in [914 mm] wide x 96 in [2438 mm ]/2455 mm high:
(4) CP-808 steel upright ( $\mathbf{1 0 1}$ 15/16 in [ 2589 mm ] long)


CP-HB2X4 Header Bracket (2)


C-400 Hanger Body (2) c/w wheels


5/16"-24 Hex Nut ZN (2)
[FT18]


1/4"-\#14 x 3/4" Hex Tek Screw (10)
[FT36]


* Extra hardware may be included


## Tools required (not supplied)

Ladder
Measuring Tape
Chalk Line
Chop Saw or Hacksaw (for cutting aluminum)

Level
Pencil Marker
Drill Impact Driver

Ø1/8 in drill bit
$\varnothing 9 / 64$ in drill bit
3/8 in Hex driver bit
\#2 Robertson driver bit
\#2 Robertson screw driver
1/2 in Wrench
Rubber Mallet
Air Gun or Cloth

## Required Pre-Installation

## Note: Read carefully - contains information which if not followed may void warranty or cause injury to users <br> All testing on this product has been completed with $2 \times 4$ lumber framing studs or $35 / 8$ in [ 92.1 mm ] metal stud framing with integrated lumber framing for rough opening to provide sufficient structural support for Crowder Frame pocket door kits. (Framing details may differ based on region. Refer to your region's building codes for framing details.) <br> To ensure proper support is provided when using lumber or metal framing studs, verification by a certified structural engineer is required. <br> KN Crowder is not responsible for framing details. KN Crowder's warranty will not cover any issues that result from incorrect structural support/framing details



Wood framing by others


Metal framing by others


## Single door opening

Rough opening height ( ROH ) from finished floor:
At least 92 1/2 in [2350 mm] high for doors up to 84 in ( $7^{\prime}-0 "$ ) or [2150 mm]
At least $1041 / 2$ in [2654 mm] high for doors up to 96 in ( $8^{\prime}-0^{\prime \prime}$ ) or [ 2455 mm ] (-EXH8 kits)
Double/bi-parting door opening
Refer to CPD-2X4-Joiner Kit installation instructions $\overline{\text { Chart CPD-2X4-A }}$ for rough opening sizes.

## Chart A: Rough opening size \& track length

| Door |  |  | Rough opening width (ROW): |  | CP-803 Track length required: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 in | (1'-6") | [457 mm] | 38 in | [ 965 mm ] | $375 / 8$ in | [ 956 mm ] |
| 20 in | (1'-8") | [508 mm] | 42 in | [1067 mm] | $415 / 8$ in | [1057 mm] |
| 22 in | (1'-10") | [ 559 mm ] | 46 in | [1169 mm] | $455 / 8$ in | [1159 mm] |
| 24 in | (2'-0") | [610 mm] | 50 in | [1270 mm] | $495 / 8$ in | [1261 mm] |
| 26 in | (2'-2") | [660 mm ] | 54 in | [1372 mm] | $535 / 8$ in | [ 1362 mm ] |
| 28 in | (2'-4") | [711 mm] | 58 in | [1473 mm] | $575 / 8$ in | [ 1464 mm ] |
| 30 in | (2'-6") | [762 mm] | 62 in | [1575 mm] | $615 / 8$ in | [1565 mm] |
| 32 in | (2'-8") | [813 mm] | 66 in | [1676 mm] | $655 / 8$ in | [1667 mm] |
| 34 in | (2'-10") | [864 mm] | 70 in | [1778 mm] | $695 / 8$ in | [1769 mm] |
| 36 in | (3'-0") | [914 mm] | 74 in | [1880 mm] | 73 5/8 in | [1870 mm] |

Track length equal to: $2 x$ door width
$15 / 8$ in
[41.3 mm]

## Installation Steps If Installing with Door Prior to Drywall

## Step \#1:

On one side of rough opening, secure one CP-HB2X4 Header Bracket to jamb with (3) \#10 x 1-1/4" Pan Head Screws [FT4] at required height based on Chart B below.

## Header bracket height:

Dimensions shown below for header bracket height are taken from finished floor. If finished floor will be installed after pocket door kit, add finished floor thickness to header bracket height.
Example: 84 in [2134 mm] high door with $3 / 4$ in thick floor $=881 / 4$ in [2242 mm] + $3 / 4$ in [19.1 mm] = 89 in [ 2260.6 mm ] new header height from sub floor (below finished floor).
Note: Foot brackets must be shimmed to level of finished floor. See step \#8 for details.
Step \#2:
On opposite side of opening, secure second CP-HB2X4 Header Bracket to jamb at same header bracket height from step \#1 with (1) \#10 x 1-1/4" Pan Head Screws [FT4] through bottom oblong hole on bracket. It is recommended to only secure this bracket with one screw to allow for plumb adjustment when installing track in step \#6.


## Chart B: Header Bracket height \& upright hole slot ID



## Step \#3:

Cut CP-803 aluminum header track to correct size if required. To calculate track length:
Length is equal to $2 x$ door width $+15 / 8$ in [ 41.3 mm ]
See column CP-803 Track length required in chart a for lengths based on door widths.


## !! Attention !!

For double/bi-parting doors, refer to step \#CPD-2 \& CPD-3 in CPD-2X4-Joiner Kit installation instructions before proceeding.

## Step \#4:

Slide two (2) C-400 Hanger Bodies with wheels into track from one end.
Note: Ensure "kncrowder.com" text on hanger bodies both face same side as shown right.


## Step \#5:

Place CP-803 Header Track with hangers onto CP-HB2X4 Header Brackets previously placed in steps \#1-2.
Note: Top of header track should sit flush with top of header brackets.

## Step \#6:

Check header track for levelness. Adjust loose header bracket if necessary. Secure header bracket with (2) \#10 x 1-1/4" Pan Head Screws [FT4].

Step \#7:
Secure CP-803 Header Track to CP-HB2X4 Header Brackets with (4) 1/4"-\#14 x 3/4" Serrated Hex Tek Screws [FT36], two (2) per bracket.
Note: Impact driver is ideal for this step or pre-drill with Ø9/64 in [ 3.6 mm ] drill bit if desired.


## !! Attention !!

For double/bi-parting door kits, refer to step \#CPD-5 \& CPD-6 in CPD-2X4-Joiner Kit installation instruction before proceeding.


## Step \#8:

Use a chalk line against bottom studs of wall to mark lines of opening on both sides as shown below. Locate and secure CP-2X4 Foot Brackets (2) or (3) for extra width kits with ( 2 per bracket) \#8 x 3/4" Pan Head Screws [FT2] as per foot bracket location $\overline{\text { Chart C }}$ below.


Note: Foot brackets are reversible. Foot brackets are to be mounted on finished floor. If finished floor is not installed, shim foot brackets to thickness of finished floor. Foot bracket location dimensions are based on standard set-up and will accommodate suggested finishing as shown on pages 17-18.
For double/bi-parting door kits, refer to step \#CPD-7 in CPD-2X4-Joiner Kit installation instruction before proceeding.

## Chart C: Foot bracket location dimensions A, B

| Door width |  |  | Dimension A |  | Dimension B |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 in | (1'-6") | [457 mm] | $201 / 2$ in | [521 mm] | 11 in | [279 mm] |
| 20 in | (1'-8") | [ 508 mm ] | $221 / 2$ in | [572 mm] | 11 in | [279 mm] |
| 22 in | (1'-10") | [ 559 mm ] | $241 / 2$ in | [622 mm] | 13 in | [ 330 mm ] |
| 24 in | (2'-0') | [610 mm] | $261 / 2$ in | [673 mm] | 13 in | [ 330 mm ] |
| 26 in | (2'-2") | [660 mm] | $281 / 2$ in | [724 mm] | 14 in | [ 356 mm ] |
| 28 in | (2'-4") | [711 mm] | $301 / 2$ in | [775 mm] | 15 in | [ 381 mm ] |
| 30 in | (2'-6") | [762 mm] | $321 / 2$ in | [826 mm] | 17 in | [432 mm] |
| 32 in | (2'-8") | [813 mm] | $341 / 2$ in | [876 mm] | 17 in | [432 mm] |
| 34 in | (2'-10") | [864 mm] | $361 / 2$ in | [ 927 mm ] | 19 in | [483 mm] |
| 36 in | (3'-0') | [914 mm] | $381 / 2$ in | [978 mm] | 21 in | [533 mm] |



## Standard Plan View

For doors 18 in [ 457 mm ] to 36 in [ 914 mm ] wide

## Step \#9:

Place C-1200 Guide series on foot bracket closest to opening end, secure with
(4) \#8 x 3/4" Pan Head Screws [FT2].

## Note:

Use C-1201 Center Guide for 1-3/8 in [ 34.9 mm ] thick doors. Use C-1202 Offset Guide for $1-3 / 4$ in [ 44.5 mm ] thick doors.


## Step \#10:

Position CP-80X Steel Uprights on foot brackets with large oval clearance holes facing out and arrow ID pointing towards opening as shown right.

## Step \#11:

Plumb uprights vertically and secure to CP-803 Header Track with (1 per upright) 1/4"-\#14 x 3/4" Serrated Hex Tek Screws [FT36].
Note: Screw and hole (refer to $\overline{\text { Chart B }}$ on page 7 for hole ID number to use) in upright should line up with top groove in CP-803 Header Track as shown right. Impact driver is ideal for this step or pre-drill with Ø9/64 in [ 3.6 mm ] drill bit if desired.


Step \#12-13:
Bottom of door does not need to be prepped, proceed to step \#14.
Step \#14:
Locate center of clearance hole/top plate on top of door and drill a $\varnothing 1 / 2$ in [12.7 mm] clearance hole at least 2 in [ 50.8 mm ] deep shown right:

Step \#15A:
Using a phillips screwdriver, remove clip screws on C-400 Hanger Bodies (previously installed in track) in order to remove C-400 Hanger Stud as shown below.


Step \#15B:
Assemble C-400 Top Plate assemblies as shown below ( 2 assemblies required):


## Step \#16:

Place assemblies from step \#15b on top edge of door with hanger bolt placed into clearance hole. Mark screw hole locations or use top plate template on page 19 and pre-drill Ø1/8 in [ 3.2 mm ] holes at least $11 / 2$ in [ 38.1 mm ] deep. Secure with (4 per hanger) \#10 x 1-1/4" Pan Head Screws [FT4].


## Step \#17:

A. Slide C-400 Hanger Bodies in track into opening
B. Stand door up in opening
C. Raise back end of door and engage hanger bolt on door with the slot on back C-400 Hanger Body (closest to pocket) (arrow \#1)
D. Secure (loosely) with clip and screws removed from step \#15a
E. Pivot back end of door into pocket and slide door between nylon guides
F. Raise front end of door and engage hanger bolt on door with slot on front C-400 Hanger Body (closest to opening) (arrow \#2)
G. Secure (loosely) with clip and screws removed from step \#15a
H. Adjust door height and plumb by using the height adjustment hex on hanger bolt with $3 / 8$ in wrench
I. Lock final height adjustment by tightening screws on clip to secure bolt and with k-lock nuts using $1 / 2$ in wrench


Step \#18:
After door has been installed, snap CDC-400 Catch/Stops into each end of track with bumpers facing towards center of track. Once snapped into track, CDC-400 Catch/Stops should be free to slide within track.


Step \#21:
Once final position is achieved, mark outside edge of CDC-400 Catch/Stop as shown right, disengage CDC-400 Catch/Stop from hanger and slide door back. Position CDC-400 Catch/Stop at mark and secure with (1) \#10 x 2-1/4" Self-Drilling Screw [FT6] in oblong hole as shown right. Recheck door position and adjust CDC-400 Catch/Stop if necessary before securing CDC-400 Catch/Stop with (1) \#10 x 2-1/4" Self-Drilling Screw [FT6] in second hole.
Note: Remove any drill fillings from inside of track as this will affect operation of sliding door system.

Step \#22:
Repeat steps \#19-21 for opposite CDC-400 Catch/Stop.
Note: Ensure that strike and trim thickness are taken into consideration for where door will be in final position. See pages 17-18 for suggested finishing.

## Step \#23:

On pocket end framing jamb, mark halfway point from floor to under side of track. Push door into opened position (closest to pocket jamb). Measure distance from back edge of door to jamb. Install (1) C-99 Rubber Bumper with (1) \#10 x 1-1/4" Pan Head Screw [FT4] and $3 / 16$ " Spacer Washers [FT12] (quantities are as required to fit in gap previously measured) to pocket jamb to act as secondary stop for door in opened position.

## Note: Additional blocking may be required to fill gap.

## Step \#24:

If required, measure and cut CP-830 Drywall Supports to fit in opening between header bracket and first upright. If pre-punched holes are cut off, re-drill with $\varnothing 11 / 64$ in [ 4.4 mm ] drill bit for a total of 3 or 4 holes per piece of CP-830 Drywall Support. Two equal length pieces are required for installation. Snap CP-830 Drywall Supports onto CP-803 Header Track as shown below with step in drywall support facing down towards floor. Once snapped on, secure with (3-4 per side) \#8 x 1/2" Self-Drilling Screws [FT32].



Refer to finishing suggestions, dimensions \& installation steps on pages 17-18.

## Important note:

Remember to clean inside of track before finishing opening. Use an air gun to blow air into track or use a cloth to wipe it. This will help eliminate any aluminum shavings or debris that may have fallen into track. If not cleaned out, shavings or debris may prevent hangers from rolling smoothly.

## Troubleshooting

## Issue <br> Chatter/noise when door is sliding

## Door is hard to move

Door does not stay engaged with CDC-400 Catch/Stop or door slides open/closed on its own

## Solution

Ensure there are no aluminum shavings within track. Shavings can become embedded in nylon tires and cause noisy operation.

Ensure guide channel secured to bottom of door is not over-tightened as this could cause sides of guide channel to "pinch" guide. Remove door and check guide channel by rolling guide roller in channel to ensure smooth travel. There should be little to no resistance. Ensure door is not dragging on bottom of floor/guides and adjust height of door as required.

Ensure CDC-400 Catch/Stops are installed in correct position such that hanger engages stop when door is closed. Hangers will not engage if door slams into stop. For slow closing/holding effect, see Type CC Catch ' N ' Close Crowder Frame systems for application (note, Type CC cannot be retrofitted into Type C or Type B Crowder Frames).

## Installation Steps If Installing Drywall Prior to Door

## Step \#D1:

Follow steps \#1-11 on pages 7-10.
Step \#D2:
Obtain a relatively straight scrap piece of lumber (ideally $2 \times 6$ framing lumber, not supplied by KN Crowder), and cut to size. Length should be width as door to be installed at a later time. For example, if door width is 36 in [ 914 mm ], lumber length should be 36 in [ 914 mm ].
This piece of lumber will be referred to as door template.
Step \#D3:
Locate center of clearance hole/top plate on top of door template and drill a Ø1/2 in [12.7 mm] clearance hole at least 2 in [ 50.8 mm ] deep as per template on page 19.


## Step \#D4:

Using a phillips screwdriver, remove clip screws on C-400 Hanger Bodies (previously installed in track) to remove C-400 Hanger Stud as shown right.


## Step \#D5:

Place assemblies from step \#D4 on top edge of door template with hanger bolt placed into clearance hole. Mark screw hole locations or use template shown on page 19 and pre-drill Ø1/8 in [ 3.2 mm ] holes at least $11 / 2$ in [ 38.1 mm ] deep. Secure with (4 per hanger) \#10 x 1-1/4" Pan Head Screws [FT9].

Assemble C-400 Top Plate assemblies as shown below ( 2 assemblies required):



## Step \#D6

A. Slide C-400 Hanger Bodies in track into opening
B. Position door template up in opening
C. Raise back end of door template and engage hanger bolt with slot on back C-400 Hanger Body (closest to pocket) (arrow \#1)
D. Secure (loosely) with clip and screws removed from step \#D4
E. Pivot back end of door template into pocket
F. Raise front end of door template and engage hanger bolt on door with slot on front C-400 Hanger Body (closest to opening) (arrow \#2)
G. Secure (loosely) with clip and screws removed from step \#D4
H. Adjust door template and plumb by using the height adjustment hex on hanger bolt with $3 / 8$ in wrench
I. Lock final height adjustment by tightening screws on clip to secure bolt and with k-lock nuts using $1 / 2$ in wrench

## Step \#D7:

Follow steps \#18-24 on pages 12-13.


## Step \#D8:

Install \& finish drywall as required. Ensure drywall is cut back to strike jamb, first set of steel uprights and CP-830 Drywall Support to exposed pocket door opening. This will be the "drywall rough opening" of pocket door system.

## Important drywall installation notes:

Use 1 in [ 25.4 mm ] long drywall screws only (provided) when securing drywall to uprights \& drywall supports. Longer screws will penetrate inside face of steel upright and damage door or affect door travel. Fasten drywall at top \& bottom of steel uprights working towards middle. It is recommended to use 8 drywall screws per upright and 4 per drywall supports.

## Step \#D9:

Once door is on site, follow steps \#12-13 on page 11.


## Step \#D10:

Remove door template from pocket by disengaging from hangers in track (reverse step \#D6).

## Step \#D11:

Remove top plate assemblies from door template and mount onto top of actual door in same position as door template per steps \#D3 - D5.
Note: Must be mounted at same distance from edge of door as on
 door template. Failure to do this will result in door not opening or closing fully in pocket.

Door Template



## Step \#D12:

A. Slide C-400 Hanger Bodies in track into opening
B. Stand door up in opening
C. Raise back end of door and engage hanger bolt on door with the slot on back C-400 Hanger Body (closest to pocket) (arrow \#1)
D. Secure (loosely) with clip and screws
E. Pivot back end of door into pocket and slide door between nylon guides
F. Raise front end of door and engage hanger bolt on door with slot on front C-400 Hanger Body (closest to opening) (arrow \#2)
G. Secure (loosely) with clip and screws
H. Adjust door height and plumb by using the height adjustment hex on hanger bolt with $3 / 8$ in wrench
I. Lock final height adjustment by tightening screws on clip to secure bolt and with k-lock nuts using $1 / 2$ in wrench


## Step \#D13:

Finish project with finishing requirements such as trim, door jambs, etc (all by others). Refer to finishing suggestions, dimensions \& installation steps on pages 17-18.

## Suggested Finishing \& Dimensions

Complete Type $B$ kit illustrated with framing, drywall \& suggested finishing by others.


## Note:

For double door kits using CPD-2X4-Joiner Kit, use this section detail for reference.

To illustrate complete installation process, suggested trim details and dimensions are shown. Site trim details and dimensions must be verified by installer and may require adjustment of dimensions that follow.
KN Crowder is not responsible for any finishing details.
Suggested details are based on a 36 in [ 914 mm ] wide x 84 in [2134 mm] high door using Type B Crowder Frame pocket door kit.

## Section View




## Finishing Steps



## Step \#F1:

Use 1 in [ 25.4 mm ] long drywall screws only (provided) when securing drywall to uprights \& drywall supports. Fasten drywall alternating between top \& bottom of steel uprights. It is recommended to use 8 drywall screws per upright and 4 per drywall supports.
Note: Longer screws may penetrate inside face of steel upright and damage door or affect door travel.


## Step \#F2:

Install plywood/wood spacer (by others) to steel uprights \& drywall support using screws (by others).
Note: Installing plywood/wood spacers will allow finishing trim to be nailed to spacers with a brad nailer for smaller holes to fill after installation.

## Step \#F3:

Install jamb finishing board on strike side and finishing pocket trim at header and pocket side of opening (by others).


## Step \#F4:

Install finishing casing around opening (by others).
Note: It is recommended to make one side of trim "easily" removable for future access for maintenance purposes.

## Clearance Hole Location Template



## How It All Comes Together



