

Metal Panel Systems
금 L.J. Smith
L.J. Smith's Linear Panel System creates the newest look in modern stairway design. This collection consists of preassembled panels resulting in a very simplified installation process for open tread stairs, kneewall stairs and level run applications.

## Very Simple to Install

Our Linear Panels can be pre-built to fit and only need a few screw holes drilled for installation. No glue needed, no sanding, no code issues, no drilling of baluster holes, no marking and cutting to fit.


## About our Panel System


$1 / 2^{\prime \prime} \times 11 / 2^{\prime \prime}$ rectangular tube construction with .065 wall thickness


Designed for 7 1/2" Rise and $10^{\prime \prime}$ Run ( $36.9^{\circ}$ )


Standard finish is Low Sheen Black. Other powder coat and Pantone paint colors can be quoted.

36" Rake rail height and $36^{\prime \prime}, 39^{\prime \prime}$ or $43^{\prime \prime}$ level run rail heights. Rail heights may vary due to field conditions or preferences


 with screws for attachment to the
handrail. Screws are also included for the bottom of each panel.

Open Tread Stair Panels


## Level Run Panels




PL-CE4239
Curb Wall or Elevated


PL-F3636
36"
Faill leight
Fush Mount

$\underset{\substack{\text { 36 RLail Height } \\ \text { Flush Mount }}}{\text { PL-F4236 }}$


PL-F4836
36" Rail Height


PL-CE3643
43" Rail Height
Curb Wall or Elevated


PL-CE4243
43" Rail Height
Curb Wal or Elevated

Flush Mount

PL-F4239
39" Rail Height
Flush Mount


PL-CE4843
43" Rail height
Curb Wall or Elevated

## Spacer Newel

Use to maintain spacing code between panels. Rake and Level Panel Runs cannot exceed $15^{\prime}$ without a spacer Newel


Level 4-Hole Foot Spacer Newel

## $1^{\prime \prime} \times 1-1 / 2^{\prime \prime} \times 34-13 / 16^{\prime \prime}$ 36" Rail Height

Flush Mount

## PL-F39NWL4H <br> $1^{1 "} \times 1-1 / 2^{\prime \prime} \times 38^{\prime \prime}$

39" Rail Height
Flush Mount
PL-E39NWL4H
$1^{\prime \prime} \times 1-1 / 2^{\prime \prime} \times 37-1 / 2^{\prime \prime}$
39" Rail Height
Elevated

## PLE43NWL4H <br> $1^{\prime \prime} \times 1-1 / 2^{\prime \prime} \times 41-1 / 4^{\prime \prime}$ 43" Rail Height

 ElevatedPL-C39NWL4H
$1^{\prime \prime} \times 1-1 / 2^{\prime \prime} \times 34-1 / 4^{\prime \prime}$ $39^{\prime \prime}$ Rail Height

Curb Wall


Kneewall 2-Hole Foot Spacer Newel PR-K36NWL2H $1^{\prime \prime} \times 1-1 / 2^{\prime \prime} \times 30-5 / 8^{\prime \prime}$ $36^{\prime \prime}$ Rail Height

## Panel Posts



Each Spacer Newel and Panel Post comes with foot lag screws for attachment to the mounting surface. Spacer Newels also include wood screws for attachment to the handrail. Each Panel Post includes 3 Panel Post and Barrel Fasteners for attachment to the panel.


P-POSTFTSCR2.75
2-3/4" Post Foot Lag Screw


P-POSTBOLT1.0 Panel Post and Barrel Fastener

## Panel Post Kit

The following kit is available to simplify the ordering of panel systems utilizing Panel Posts.


Flush, Elevated and Curb Wall Details


## Square Nosed Treads, Landing Tread, False Tread Kit

These new products feature squared details for today's modern stairway designs.



Handrail and Handrail Fittings



Stairway Anatomies


## Ordering Guidelines

The following guidelines are designed to provide an accurate and complete list of components necessary to complete your panel railing system. This checklist and our Linear Collection Metal Panel Systems brochure will provide the flexibility to comply with most building codes as they relate to handrail height and infill spacing requirements. The following guidelines are designed for stairways with $71 / 2^{\prime \prime}$ rise and $10^{\prime \prime}$ run (approx $36.9^{\circ}$ ), a rake handrail height of 36 " and level handrail heights between 36 " and $43^{\prime \prime}$ (depending on handrail used, curb wall height, amount panels are elevated, etc.). All metal panel lengths are plan view measurements. All products are for interior use only. Consult your local building code official before purchasing and installing this system. For interior use only.

| Item |  | Guidelines | Part \# | Qty. |
| :---: | :---: | :---: | :---: | :---: |
| 1 | TREADS | Select one tread for each step. If false treads are utilized, select one or two per tread depending on application. |  |  |
| 2 | LANDING TREAD | Select sufficient lineal footage of LJ-8890-5 for the entire balcony and width of stairs at each landing. Custom landing tread can also be quoted and ordered. |  |  |
| 3 | COVE MOULD | Select sufficient lineal footage of LJ-8895 to go under all landing tread. (For level runs and stairs with risers) |  |  |
| 4 | RAKE PANELS | Open Tread Stairways: Select the appropriate sizes and quantity of open tread stair panels to fill the plan view layout of the open tread stairway rake. Spaces between panels can be no more than 4 ". Be sure to take into consideration the $1 / 2^{\prime \prime}$ thickness of each Panel Post and 1" thickness of each Spacer Newel (see 6 \& 7 below) when calculating the spacing. Select from the following rake panels: (sizes indicated are plan view widths) PR-O1236 (12"), PR-O1836 (18"), PR-O2436 (24"), PR-O3036 (30"), PR-O3636 (36") <br> Kneewall Stairways: Select the appropriate sizes and quantity of kneewall stair panels to fill the plan view layout of the kneewall stairway rake. Spaces between panels can be no more than 4". Be sure to take into consideration the 1 " thickness of each Spacer Newel if used (see 7 below) when calculating the spacing. Select from the following rake panels: (sizes indicated are plan view widths) PR-K1236 (12"), PR-K1836 (18"), PR-K2436 (24"), PR-K3036 (30"), PR-K3636 (36") |  |  |
| 5 | LEVEL RUN PANELS | Elevated Panels: Select the appropriate sizes and quantity of panels to fill the plan view layout of each level run. Spaces between panels can be no more than 4 ". Be sure to take into consideration the $1 / 2^{\prime \prime}$ thickness of each Panel Post and 1" thickness of each Spacer Newel (see 6 \& 7 below) when calculating the spacing. Select from the following level panels for a 39" level rail height: PL-CE1239 (12"), PL-CE1839 (18"), PL-CE2439 (24"), PL-CE3039 (30"), PL-CE3639 (36"), PL-CE4239 (42"), PL-CE4839 (48). Select from the following level panels for a 43" level rail height: PL-CE1243 (12"), PL-CE1843 (18"), PL-CE2443 (24"), PL-CE3043 (30"), PL-CE3643 (36"), PL-CE4243 (42"), PL-CE4843 (48") <br> Curb Wall Panels: Select the appropriate sizes and quantity of panels to fill the plan view layout of each level run. Spaces between panels can be no more than 4". Be sure to take into consideration the 1 " thickness of each Spacer Newel if used (see 7 below) when calculating the spacing. Select from the following level panels for a 39" level rail height: PL-CE1239 (12"), PL-CE1839 (18"), PL-CE2439 (24"), PL-CE3039 (30"), PL-CE3639 (36"), PL-CE4239 (42"), PL-CE4839 (48"). Select from the following level panels for a $43^{\prime \prime}$ level rail height: PL-CE1243 (12"), PL-CE1843 (18"), PL-CE2443 (24"), PL-CE3043 (30"), PL-CE3643 (36"), PL-CE4243 (42"), PL-CE4843 (48") <br> Flush Mount Panels: Select the appropriate sizes and quantity of panels to fill the plan view layout of each level run. Spaces between panels can be no more than 4". Be sure to take into consideration the 1 " thickness of each Spacer Newel if used (see 7 below) when calculating the spacing. Select from the following level panels for a 36" level rail height: PL-F1236 (12"), PL-F1836 (18"), PL-F2436 (24"), PL-F3036 ( 30 "), PL-F3636 (36"), PL-F4236 (42"), PL-F4836 (48"). Select from the following level panels for a 39 " level rail height: PL-F1239 (12"), PL-F1839 (18"), PL-F2439 (24"), PL-F3039 (30"), PL-F3639 (36"), PL-F4239 (42"), PL-F4839 (48"). |  |  |
| 6 | PANEL POSTS | Panel Posts are used on open tread stairways and elevated panel level runs. Select 2 Panel Posts with 2-Hole Foot Plate (P-POST2H) per panel. The Panel Post with 4-Hole Foot Plate (P-POST4H) is often used at the end of a level run that ends near a wall. <br> NOTE: A Panel Post kit is available that includes: 2 Panel Posts with 2-Hole Foot Plate (P-POST2H), 4 Post Foot Lag Screws (P-POSTFTSCR2.75) and 6 Post and Barrel Bolts (P-POSTBOLT1.0). |  |  |
| 7 | SPACER NEWELS | Spacer newels must be used in any space between panels that is over 4 " to comply with building codes. Also, rake and level runs cannot exceed 15 ' without a spacer newel. <br> Kneewall Stairways: Select the necessary quantity of Kneewall Spacer Newels (PR-K36NWL2H). <br> Level Run Elevated Panels: Select the necessary quantity of Level Spacer Newels. For a 39" level rail height: PL-E39NWL4H. For a 43" level rail height: PL-E43NWL4H <br> Level Run Curb Wall Panels: Select the necessary quantity of Level Spacer Newels. For a 39" level rail height: PL-C39NWL4H. For a 43" level rail height: PL-C43NWL4H <br> Level Run Flush Mount Panels: Select the necessary quantity of Level Spacer Newels. For a 36" level rail height: PL-F36NWL4H. For a 39" level rail height: PL-F39NWL4H |  |  |
| 8 | HARDWARE | Every rake and level panel comes with screws for attachment to the handrail. Screws are also included for the bottom of each panel (use for level flush mount, level curb wall mount and kneewall stair applications only). Spacer newels and panel posts include post foot lag screws. Spacer newels also include screws for attachment to the handrail. Each panel post includes 3 panel post and barrel fasteners. The panel post kit includes 6 panel post and barrel fasteners and 4 post foot lag screws. Each of these hardware items are also available separately, if needed. See pages $2 \& 4$. |  |  |
| 9 | HANDRAIL | Select 684 handrail at a rate of $13^{\prime \prime}$ per each tread and include enough for all level runs and walls (if wall rail is required). Handrail is available in $8^{\prime}, 10^{\prime}, 12^{\prime}, 14^{\prime}, \& 16^{\prime}$ lengths. |  |  |
| 10 | HANDRAIL GOOSENECK FITTINGS | A gooseneck handrail fitting must be used for the following rake to level run transitions: 36" rake to 39 " level; $36^{\prime \prime}$ rake to $42^{\prime \prime}$ level; 39 " rake to $42^{\prime \prime}$ level. Select the appropriate gooseneck fitting: 784LHGN (Left Hand Gooseneck), 784RHGN (Right Hand Gooseneck), 784SGN (Straight Gooseneck) |  |  |
| 11 | HANDRAIL FITTINGS (Miscellaneous Components) | Select the necessary Overeasing, Upeasing and Level Quarterturns as needed for changes in elevation and/or direction of the handrail. If continuous handrail is needed to transition from the rake, around a wall, and continue up the stair as wall rail, select two Level Quarterturns. Select from these fittings: 784OE (Overeasing), 784UE (Upeasing), 784QTR (Level Quarterturn) |  |  |



## TooLs List

- 5/32" Allen Wrench or Hex Driver
- 1/8", 3/16", 3/4" Twist Bits
- Square or Phillips Screw Tip
- Miter Saw
- Hack Saw
- Power Drill

Consult your local building code official before purchasing and installing this system. Please contact your L.J. Smith dealer or representative if you have any questions about our Linear Collection products.

