

TELESCOPIC ALUMINUM MODULAR CONSTRUCTION STAIR SYSTEM

INDUSTRIAL
COMMERCIAL
RESIDENTIAL

METALTECH SMARTSTAIRS

SMARTSTAIRS™ CALCULATOR

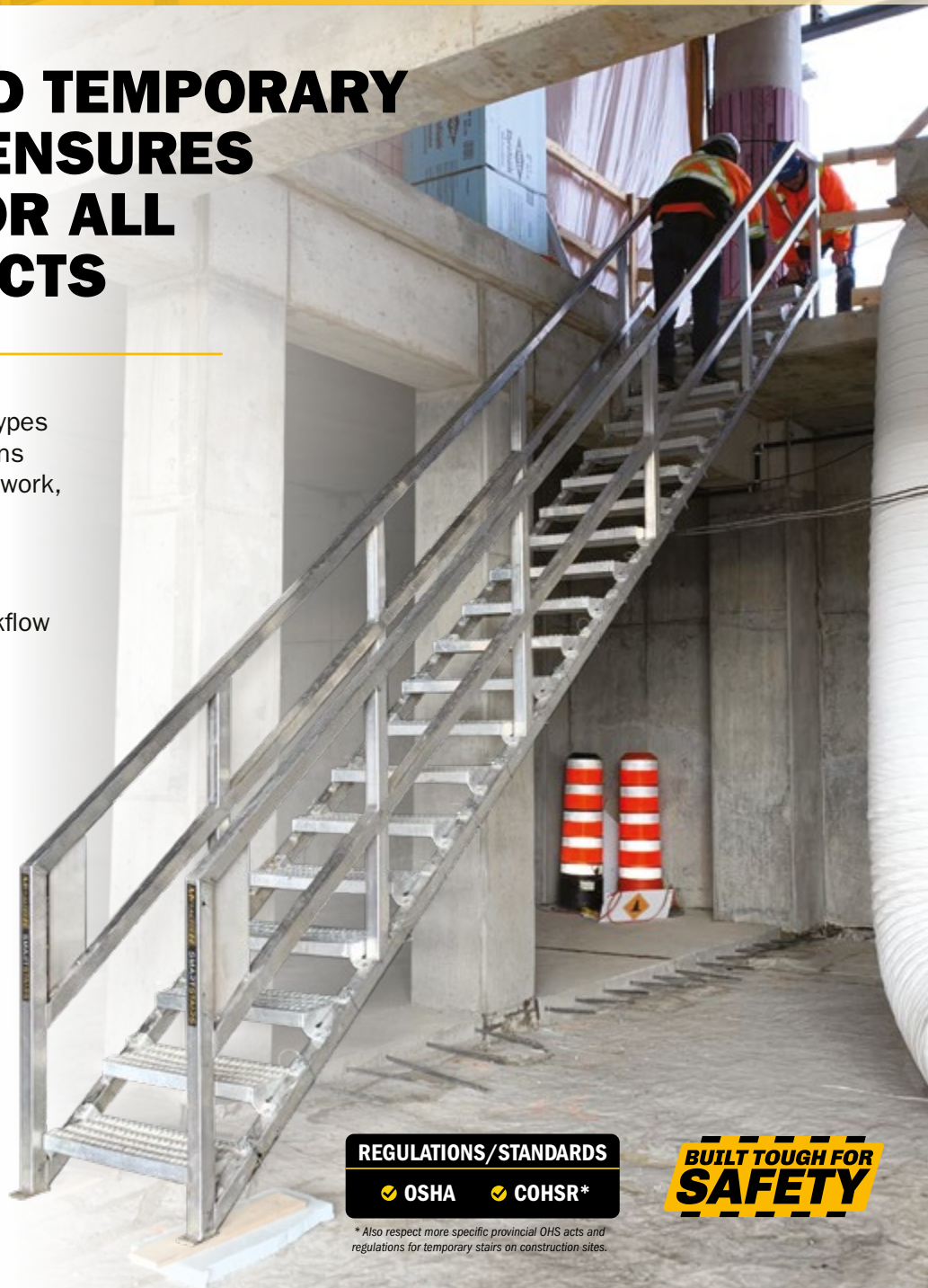
A VERSATILE AND TEMPORARY SOLUTION THAT ENSURES SAFE ACCESS FOR ALL TYPES OF PROJECTS

The Smartstairs™ can be used in several types of environments, industries, and applications such as: civil engineering, excavation, formwork, renewable energies, carpentry, insulation, waterproofing, masonry, mechanical and electrical works.

This temporary solution facilitates the workflow of all jobsite trades.

FEATURES

- 1 ALUMINUM
- 2 TELESCOPIC
- 3 REUSABLE
- 4 MODULAR
- 5 NON-SLIP STAIRS



REGULATIONS/STANDARDS

✓ OSHA ✓ COHSR*

* Also respect more specific provincial OHS acts and regulations for temporary stairs on construction sites.

**BUILT TOUGH FOR
SAFETY**

STEPS TO PROPERLY EVALUATE YOUR NEEDS

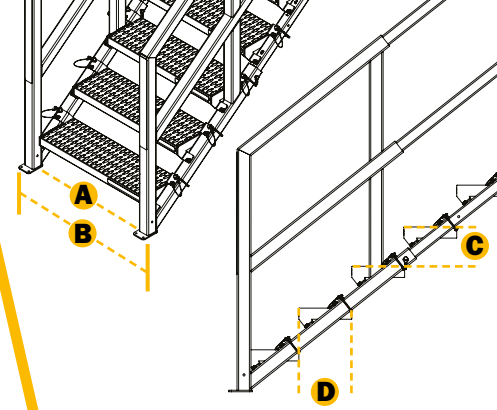
DO YOU NEED A HIGH STRINGER OR A LOW STRINGER?

LOW STRINGER: Should be used when the staircase is against a wall. In this case, the wall replaces the railing, and the installation is safe.



A low stringer must be installed at a maximum of 350 mm (14") from a wall.

HIGH STRINGER: Safe solution that can be used in every situation. We advise you to invest in high stringers since you do not know the environment of your next installation. Perhaps a high stringer will be mandatory.



LEGEND
A : WIDTH BETWEEN THE TWO STRINGER : 30"
B : STAIRCASE WIDTH : 35"
C : STEP HEIGHT : 7.5"
D : RUN (DEPTH) : 9.5"

WHICH MODEL OF STAIRCASE DO YOU NEED?



3 TO 5 STEPS

MINIMUM HEIGHT	22.5"
MAXIMUM HEIGHT	37.5"

MODEL: AL-SSEH5



6 TO 10 STEPS

MINIMUM HEIGHT	45"
MAXIMUM HEIGHT	75"

MODEL: AL-SSEH10



11 TO 16 STEPS

MINIMUM HEIGHT	82.5"
MAXIMUM HEIGHT	120"

MODEL: AL-SSEH16



17 TO 21 STEPS

MINIMUM HEIGHT	127.5"
MAXIMUM HEIGHT	157.5"

MODEL: AL-SSEH21

*If you need to reach a floor above 157.6" from the ground, adding a landing will be necessary - Proceed to the landing section. ►

CALCULATION TO DETERMINE THE SMARTSTAIRS™ MODEL THAT MEETS YOUR NEEDS

STEP 1

Measure the height of the floor that need to be accessed, in inches (floor to floor).



STEP 2

Calculation of the number of steps.
 • Divide the height by 7.5" (height of the riser).

Ex: 142 inch / 7.5 = 18.9 -> 19

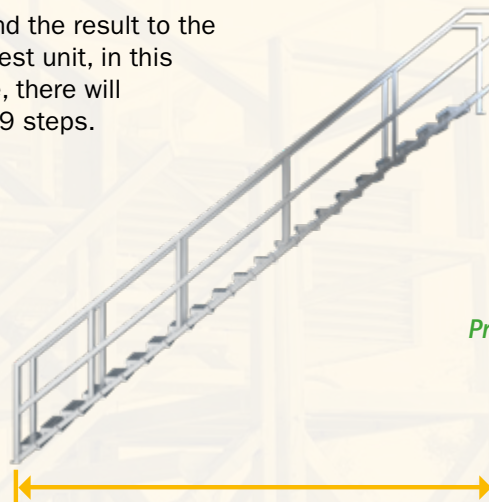
Round the result to the nearest unit, in this case, there will be 19 steps.

STEP 3

Make sure you have enough floor space to install your staircase.

• Length of treads
 9.5" X nb of steps.

Ex: 9.5" X 19 = 180.5" on the floor.



*If you do not have enough floor space, adding a landing will be necessary.
 Proceed to the landing section. ►

STAIR LANDING SECTION

Smartstairs™ staircases can be configured to your needs, the possibilities are endless! Several components are available to design your modular stairs. The Smartstairs™ landings allows you to install two staircases one on top of each other to reach up to 24' high.

When you use a Smartstairs™ landing, your staircase is fixed on the fixing plates at the base of the landing. An additional physical step must be installed on the empty holes on the top of the stringers. The last step of the first flight of the staircase is the landing.

SIMPLE LANDING:

Allows a 90-degree rotation or a straight-line continuity.



MODEL: AL-SSPSK

DOUBLE LANDING:

Allows a 180-degree rotation.



MODEL: AL-SSPDK

i

When you are using a simple or double landing you will need an extra step.



CALCULATE THE NUMBER OF STEPS FOR THE CONFIGURATION OF YOUR TWO STAIRCASES WITH A LANDING

STEP 1 Measure the height of the floor that need to be accessed, in inches (floor to floor).

STEP 2 Subtract 15" and divide by 7.5" to know the number of steps for the configuration of your two staircases.

Ex : $(142" - 15") / 7.5" = 16.9 \rightarrow 17$ steps

STEP 3 Choose the configuration of your upper and lower stairs.

In this case you can use two staircases 6 to 10 and configure it according to your preference.

For example, you could choose to put 7 steps on the bottom staircase and 10 steps on the top staircase.

STEP 4 In your order it will be important to add an extra step and a landing.

i

To increase the stability of the installation it is better to install the smallest staircase under the landing.

STEP 5 Choose your leg models: Your lower staircase model will determine the leg model you will need for your installation. The longer the staircase, the longer the legs.

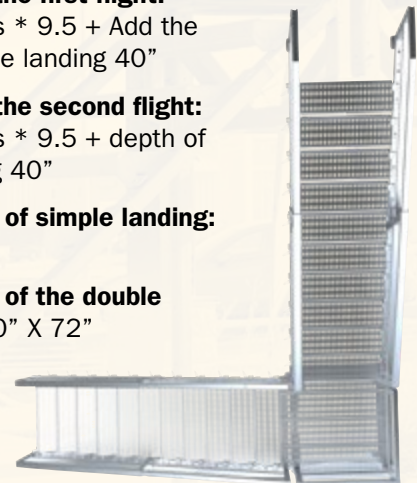
- Bottom staircase 3 to 5: MODEL: AL-SSPA5K4
- Bottom staircase 6 to 10: MODEL: AL-SSPA10K4
- Bottom staircase 11 to 16: MODEL: AL-SSPA16K4

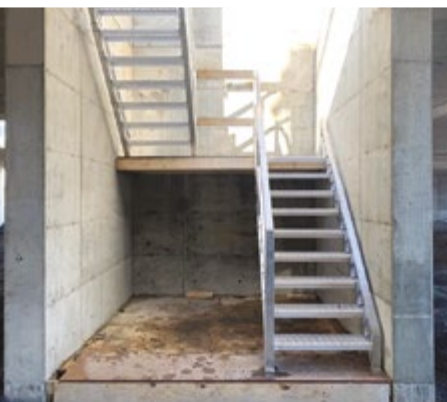
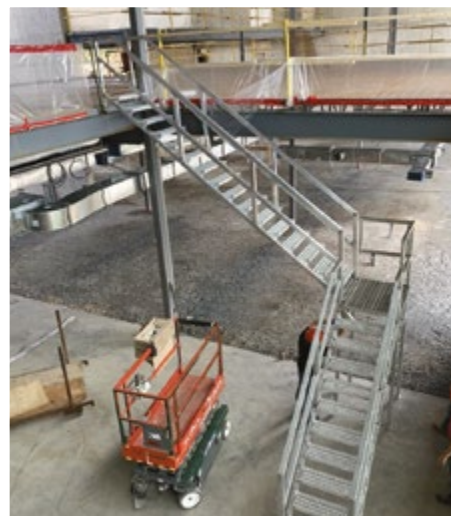
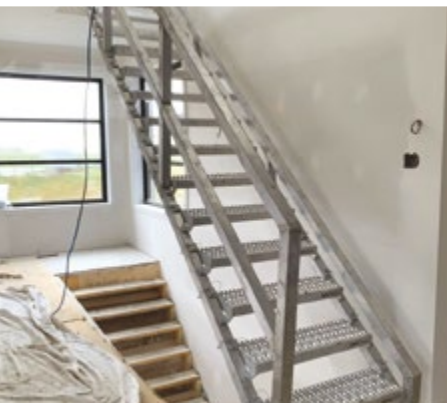
STEP 6 The railing and the cross braces depend on the choice of landing and on the configuration of your stairs.

- **Simple landing** (second flight to the left and to the right): you will need a corner railing kit MODEL: AL-SSGL and no cross brace.
- **Simple landing** (second flight in a straight line): you will need two simple "P" railings MODEL: AL-SSGP and two cross braces for simple landing MODEL: AL-SSCS
- **Double landing:** you will need a double railing kit MODEL: AL-SSGU and a cross brace for double landing MODEL: AL-SSCD

STEP 7 Make sure you have enough floor space to install your stairs (calculation) :

- **Length of the first flight:**
nb of steps * 9.5 + Add the depth of the landing 40"
- **Length of the second flight:**
nb of steps * 9.5 + depth of the landing 40"
- **Dimension of simple landing:**
40" X 40"
- **Dimension of the double landing:**
40" X 72"





SCAN TO VIEW
PRODUCT PAGE

(<https://www.metaltech.co/category/smartstairs/>)

1 800 363-7587

CS@METALTECH.CO

WWW.METALTECH.CO