SMART ESTIMATOR

SMART SCAFFOLDER

CONFIGURATION

USER GUIDE

Version: 2024.0

CADS

GLOBAL CONSTRUCTION
SOFTWARE AND SERVICES

AUTODESK
Authorized Developer

Microsoft Partner

Contents

Introduction

Thank you for choosing SMART Estimator.

The SMART Estimator Configuration is used to set which scaffolding components are available to be used for your scaffolding projects.

From the configuration you can create new scaffolding systems, set the available bay sizes, control how every component will be priced and set the weight of every scaffolding component. You can also set how each component will be used. All of this information is used throughout the SMART Estimator suite, so the 3D model, price, quote, material list and drawings all meet your business needs.

Create a new project

Please see the **Getting Started Guide** for instructions on how to create a new project.

Open the configuration

To view all of the scaffolding components available, select the **Configuration** tab.
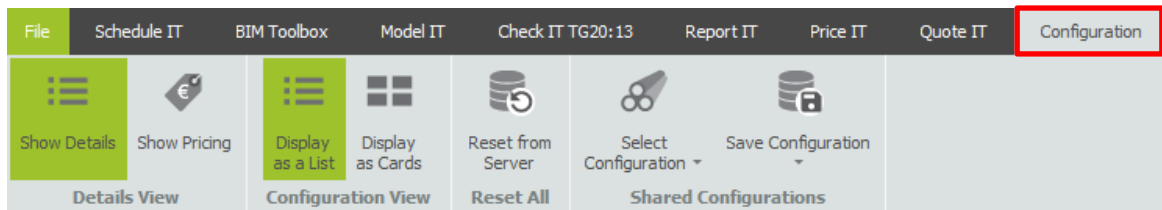
If you can't see the **Configuration** tab, please create a new project first from the **New** menu.
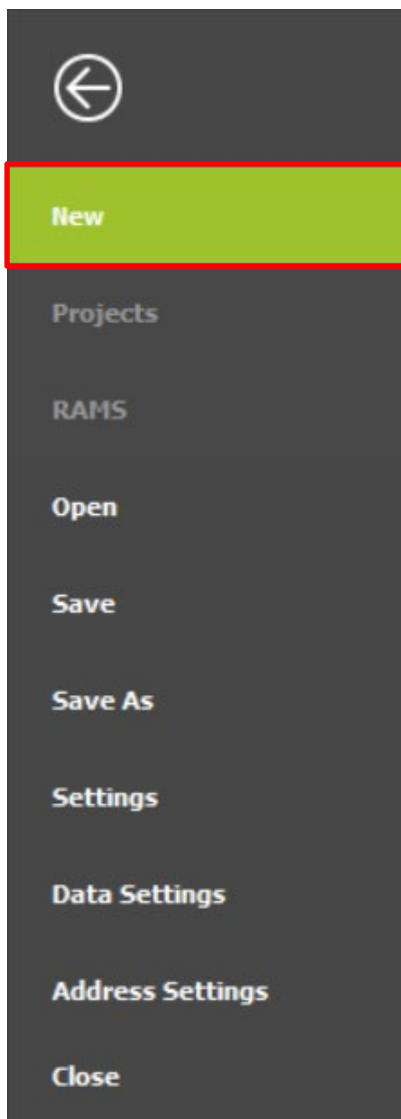
Create a new scaffolding system configuration

The first thing we will do is create a new configuration. To do this, select the **Save Configuration** menu:

Depending on the scaffolding systems you have licenced, the options in this list may appear different for you.
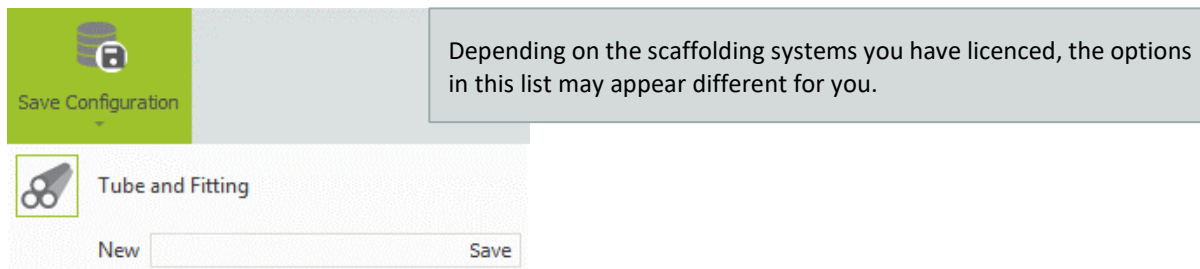
In the **New** box at the bottom, type the name of your new configuration. You can use any name you like, but for this example, we will use "My System".
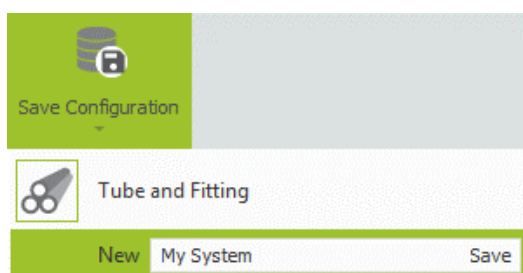
Now press the **Save** button to create your new configuration.

If you are connected to the **SMART Scaffolder Enterprise Server**, you will get a message similar to this:
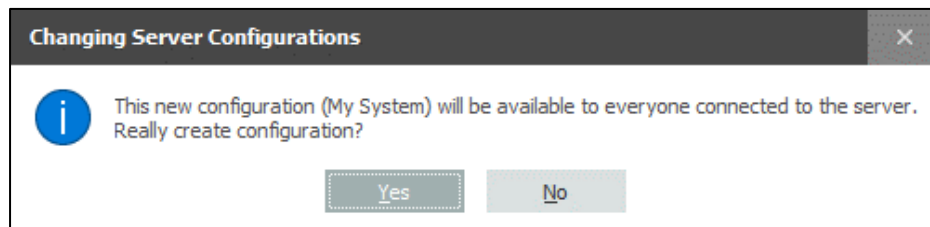
If so, select **Yes** to continue.

You can check that your new configuration has been created by pressing the **Select Configuration** menu:
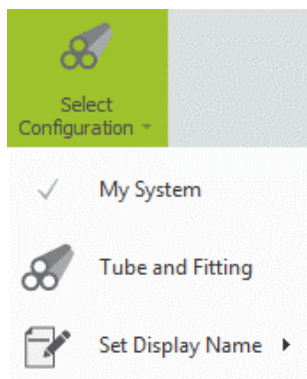
You have successfully copied the existing configuration with a new name, so we can start making changes.

Changing the view

The main section of the **Configuration** tab shows all of the components available for your configuration. Components are either shown as a list, or as cards:

> The list view shows all of the available components, grouped by type.

> The cards view shows each of the component as a separate card, in alphabetical order.

You can switch between these two views using the **Configuration View** buttons:
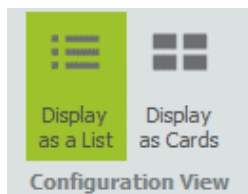
Configure your scaffolding components

The following can be set from the **Show Details** view in the **Configuration** tab. To select the **Show Details** view, please select the **Show Details** button in the top left corner of the **Ribbon**.
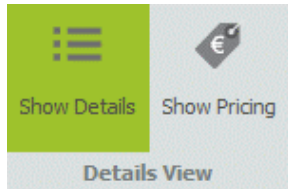
Depending on your available licences, these buttons may be hidden. If they are, you are in the **Show Details** view already.

Configure the available sizes

You can select components by checking the checkbox in the **Select** column or card row.

SMART Estimator will create scaffolds using only components which are selected in the configuration.

It is possible to select too few components, so that SMART Estimator cannot create scaffolds at all!

Please make sure that you always have a minimum of one of each component type selected that you might wish to use when scaffolding.

Set the component names

SMART Estimator provides some component names by default, which appear on reports such as the material list.

You can change them to names that you prefer. For example, you might change "Kwikstage ledger: 8' (2.44m)" to "Wedge 8' horizontal".

To do this, simply select the name in the **Material** column or card row and change it.

Select	Material	⬇	Preferred Roles	⬇	Product Code	Weight	Dimension	Image
✓	Wedge 8' Horizontal		Independent, Edge protection, Cir...		9014/KAX42438	9.52 kg	Length : 2.44 m	

Wedge 8' Horizontal ⌃

Select:	✓
Material:	Wedge 8' Horizontal
Preferred Roles:	Independent, Ed... ▾
Product Code:	9014/KAX42438
Weight:	9.52 kg
Dimension:	Length : 2.44 m ▾

If you are using the card view, or if your list is organised in alphabetical order, the component you were editing might change position. It may even move off screen, so you might have to scroll up or down to find it.

It may be useful to organise similar components so they appear close together alphabetically. Components appear in the material list in alphabetical order.
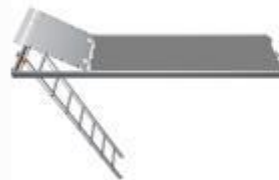
Set the component product codes

Some components have product codes, which appear on reports such as the material list. These are generally taken from the manufacturer's guides, at the time that component was added to SMART Estimator.

If you want to add or change a component's product code, simply select the **Product Code** in the column or card row and change it. It is usually a good idea to keep the product code quite short. Long product codes may affect the layout of the material list report.

If you are in the list view, with the list organised by product code, the component you were editing might change position. It may even move off screen, so you might have to scroll up or down to find it.

Set the component weight

Every component has a weight, which appears in reports such as the material list. It can also be used for pricing the materials or transport.

If you want to change a component's weight, simply select the **Weight** in the column or card row and change it. It is not usually a good idea to set the weight to 0, since any component will have a significant weight if there are enough of them in the list.

If you are in the list view, with the list organised by weight, the component you were editing might change position. It may even move off screen, so you might have to scroll up or down to find it.

Configure your component prices

The following can be set from the **Show Pricing** view in the **Configuration** tab. To select the **Show Pricing** view, please select the **Show Pricing** button in the top left corner of the **Ribbon**.
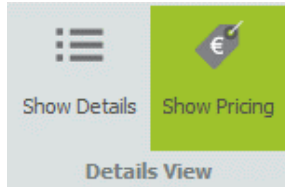
You can only set pricing if you have the **Price IT** module licence. If you do not have this licence, the buttons above will be hidden. In this case, please skip this section.

If you do not have permission to access the pricing view, you will see an error message when you press the *Show Pricing* button.

Please see your own IT team to gain the required permissions.

Set which components will be sold

There are two ways of pricing components in SMART Estimator:

▶ Sale Item

Some components, such as plastic sheeting, may not be returned in a condition where they can be used again for the next scaffolding project. Such components are usually sold, rather than hired out.

▶ Hire Item

Unless you are selling the scaffold to your client, most components will be hire components. This means that a set weekly rate is charged over the hire period, and the components are returned to you at the end of the project.

To set whether a component is a **Sale Item** or **Hire Item**, set the **Sale Item** column or card row.

Select	Material	Product Code	Image	Sale Item	Stock Value	Hire Price per Week	Extra Hire Price per Week	Pricing Method	Labour Time
✓	Plastic sheeting				£1.000			per square metre	1

Sale Item

Hire Item
Sale Item

Plastic sheeting ⌃

Select: ✓

Material: Plastic sheeting

Product Code:

Sale Item: Sale Item

Hire Item
Sale Item

Stock Value:

Hire Price:

Extra Hire Price:

Pricing: per square metre

Labour Time: 1

Set the stock value

For scaffold components which are *Sale Items* (see the **Set which components will be sold** section above), the **Stock Value** can be set. This is the base value that the scaffolding component will be sold for, before any modifications are applied in **Cost Analysis**.

To change the **Stock Value**, select the **Stock Value** list column or card row, and change it. If you cannot select the **Stock Value**, please ensure that this component is set as a *Sale Item*.

Please note that this value is linked to the **Pricing Method**. Please see the **Set the Pricing Method** section below.

Set the hire and extra hire prices

For scaffold components which are *Hire Items* (see the **Set which components will be sold** section above), the **Hire Price per Week** and **Extra Hire Price per Week** can be set. This is your weekly material cost to hire out this component during the hire period, and the (usually larger) weekly charge after the hire period, respectively.

To change the **Hire Price per Week** and **Extra Hire Price per Week**, select the appropriate list column or card row, and change it. If you cannot select the **Hire Price per Week** and **Extra Hire Price per Week**, please ensure that this component is set as a *Hire Item*.

Please note that these values are linked to the **Pricing Method**. Please see the **Set the Pricing Method** section below.

Set the Pricing Method

For every component, you can set the way the component will be priced. A selection of the following options are available for every component:

► per item

This is the simplest pricing method. Whichever prices you have set are used for pricing the component.

► per metre

The prices you have set are multiplied by the metric length of the component. You can use this to, for example, charge a rate based on the total length of all the tubes in the scaffold.

► per foot

As *per metre* but measured in imperial feet.

► per square metre

The prices you have set are multiplied by the metric area of the component. You can use this to, for example, charge a rate based on the total area of all the decking (boards) in the scaffold.

► per square foot

As *per metre* but measured in imperial square feet.

Select	Material	Product Code	Image	Sale Item	Stock Value	Hire Price per Week	Extra Hire Price per Week	Pricing Method	Labour Time
☑	Layher AR O-steel deck T...	3863.257		Hire Item ▾		£0.417	£	per metre ▾	1

per item
per metre
per foot

When you use a pricing method other than the **per item** method, you will not see the multiplied rate for each individual component. However, the multiplied rate is used in **Cost Analysis** to price your scaffolding.

Finding components

Each component has some sizes, which are shown in the **Dimension** list column or card row.

These can't be changed, but you can use this to check whether the component sizes you use are available in the configuration.

Sorting the list of components

Show and hide component groups

The list of components is automatically grouped into similar types of components, such as tubes, decking, brackets, etc.

You can hide the components in a group by clicking on the arrow to shrink the group. Click the arrow again to show the components in the group.

Sort the components

You can sort the list of components, to make it easier to find the right ones. To sort the list using a column, click on that column header bar. A small symbol appears on the right side on the column header, to show that it is being used for sorting. The list is sorted into ascending order, based on the column you selected. To sort in descending order instead, click the column header again.

Select	Material		Preferred Roles
Select	Material		Preferred Roles

Search for a component

It is possible to search the component list, using the **search bar**.

If the search bar does not appear, try pressing **Ctrl + F**. If it doesn't appear when you press **Ctrl + F**, try clicking in the grid and press the keys again. The image column is a good one to click on.

Set the display name for your scaffolding system

The **Display Name** for your configuration is the name that will appear in the quotation (if you have **Quote IT**).
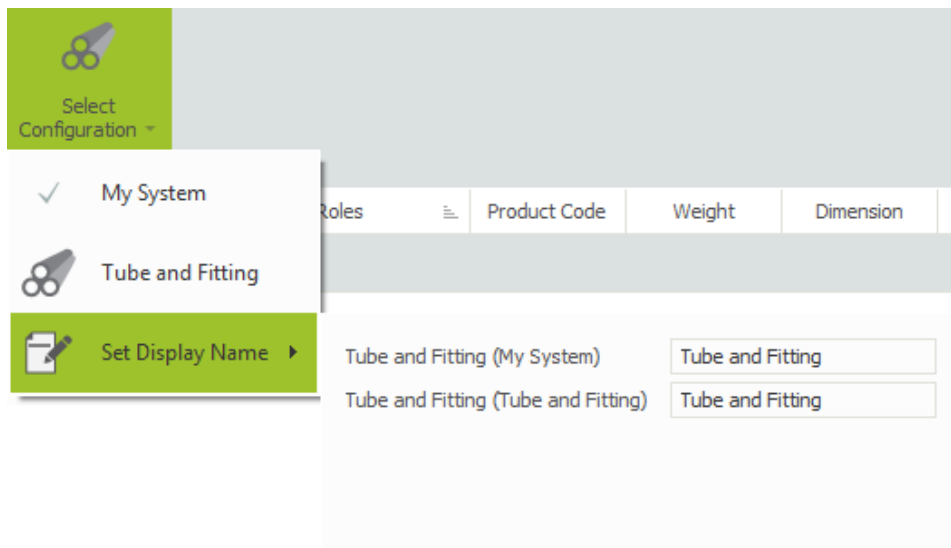
Multiple configurations with the same display name are grouped together in the selection menus. Configurations with different display names are shown separately.
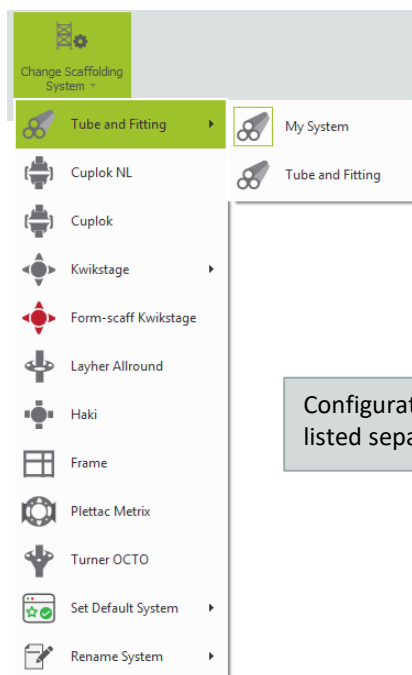
Configurations with the same **Display Name** are grouped together in the menu.

Configurations with different **Display Names** are listed separately.

Remove a scaffolding system configuration

You may decide that some of your scaffolding system configurations are no longer required.

It is not possible to remove the last configuration for a single type of scaffolding.

For example, it is not possible to remove the only remaining ring-type scaffolding configuration.

To remove a configuration, select it from the **Delete Configuration** drop-down menu.
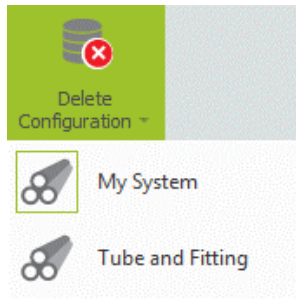
Create scaffolds using your new system

If you have the **Schedule IT**, **Report IT** or **Model IT** licences, you will be able to see and use your new configurations from the **Change Scaffolding System** menu.

A scaffold built with the Cuplok system.

An equivalent tube-and-fitting scaffold.
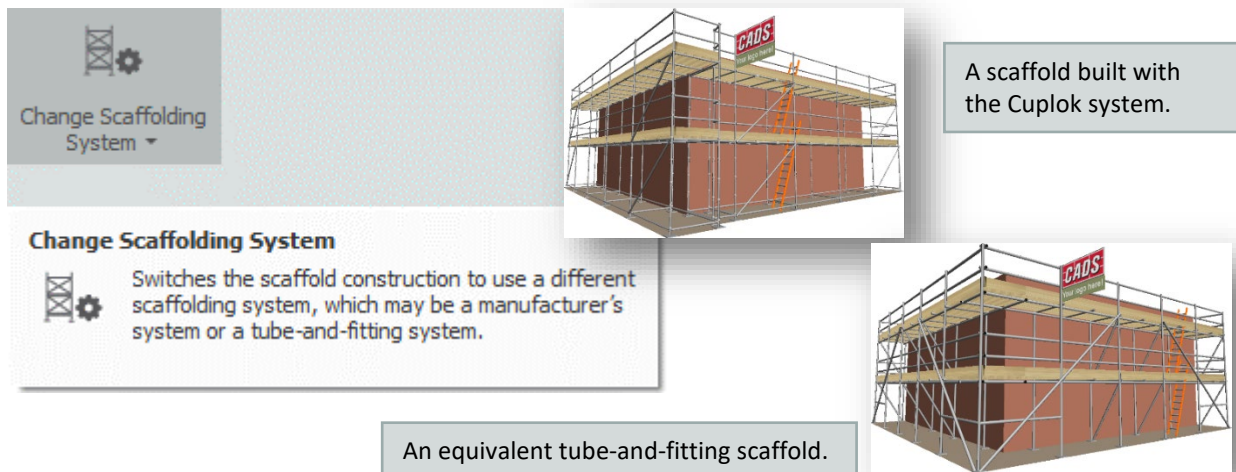
Advanced configuration

This section describes some advanced settings. These should only be used by expert users. When these settings are set incorrectly, components will be used incorrectly or missed from the scaffolding.

Configuring preferred roles

The way each component is used in the scaffolding can be set by changing its **Preferred Roles**.

A single component can be set so it is used differently for each type of scaffold. Different roles can be set for each type of scaffold by selecting them from the check list. Some roles are only available for specific types of scaffold. The full set of roles is as follows:

Role	Description
Advanced guard rail frame	Used by the Plettac Metrix scaffolding system, these frames act as ledgers, double guard rails and façade bracing.
Anchor	Bolt for connecting the scaffold to the elevation.
Ballast	Weights added to the loading bay gate for balance.
Base collar	Connects the base jack to the first standard.
Base plate	Plate and adjustable jack, to support the standards.
Base stair	Stair unit which can only be used at the first lift.
Bay arm	Arms for holding the loading bay gate's mesh panel.
Bay gate	The whole loading bay gate.
Bay infill transom	Used by some systems to connect to an intermediate transom at the rear of the loading bay tower.
Beam	Used to create openings in the scaffold around obstructions. Temporary Roof: The beams used to form temporary roof scaffolds.

Beam hangar	Used to connect the frames of a frame birdcage (area) scaffold.
Beam rider	Clips onto the beam to makes 90 degree connections.
Board clamp	Holds down the decking boards.
Bracing guardrail	Used by the Turner OCTO scaffolding system, these beams act as guardrails, foot lift ledgers and façade bracing.
Bracket brace	Supports inside platforms.
Brick guard	Mesh panel cladding.
Castor	Castors used for moving small scaffolds.
Cladding	Used for enclosing the scaffold.
Corner filler	Decking platform connected to a single standard at an inside corner.
Corrugated sheet	Corrugated sheeting used by cantilever fans.
Cross brace	Cross bracing used to connect the frames of a frame scaffold.
Diagonal corner filler	Decking platform connected to two standards at an inside corner.
Double beam rider	As beam rider, but allows connections to two lifts.
End frame	Used to create the final frame of a frame scaffold run. Usually used in place of a ladder.
End standard	Standard which has a shortened top, to prevent creating a trip hazard at the top level.
End toe board clip	As toe board clip, but used at the end of a scaffold run only.
Entrance step	A step up onto the first lift of a stair tower.
Façade bracing	Diagonal bracing around the outer face of the scaffolding.
Fan bracket	Supports a cantilever fan.
Frame ledger	Temporary roof: Ledger connecting beams.
Footlift guardrail	A special guardrail used by some system stair towers at the first lift only.
Gate arm	Arms for holding the loading bay gate's mesh panel.
Guard rail	Guard rail.
Guard rail frame	Frame to create double guard rails.
Guard rail post	Supports the guardrail. Usually used with an attached stair tower.
Handrail post	Supports the inner guardrails. Usually used with a stair tower.
H-Frame	Acts as two standards plus a transom connecting the two.
Hoist	Hoist or gin wheel and rope.
Horizontal end coupler	Connects two tubes horizontally. Sometimes known as a sleeve coupler.
Inside board bay transom	A transom which includes a cut-out, so it can support both the main boards and inside boards at the standard position.
Inside board support	Transom which only supports inside boards.
Inside board transom	Transom which supports the main platform and inside boards.
Inside platform	Decking used for inside boards.

Inside platform tie	Connects multiple cantilever (hop-up) brackets together to act as an inside ledger.
Intermediate standard	Connects two lifts vertically by hanging in the air between them.
Intermediate standard restraint	Connects a loading bay tower to the inner standard of the independent scaffold.
Intermediate transom	Transom used (usually to support boards), away from the standard positions.
Knee brace	In-line diagonal support brace.
Ladder	Ladder. Excludes fully vertical ladder-bracket ladders.
Ladder access transom	Acts as a transom, but allows a gap for a ladder position.
Ladder beam	Low yield beam for creating openings in the scaffold.
Ladder bracket	Attaches a vertical ladder to the outside of the scaffold.
Ladder clamp	Attaches the (non-vertical) ladder to the scaffold.
Ladder for ladder platform	The ladder used with a matching *Ladder platform (requires ladder)*.
Ladder hatch	A hatch for allowing access at a ladder position.
Ladder platform with ladder	A hatch, deck and ladder as a single component.
Ladder platform (requires ladder)	As above, excludes the ladder. (Used with *Ladder for ladder platform*)
Landing platform	Platform, used mainly by system stair towers.
Ledger	Ledger: Runs in the scaffold run direction only.
Ledger bracing	Bracing which runs in the width direction.
Ledger for boarded lift	As ledger, for boarded lifts only.
Ledger for unboarded lift	As ledger, for unboarded lifts only.
Ledger gap cover	Covers gaps near the tubes in the ledger direction, to prevent trip hazards.
Main platform	Decking used in the main run of the scaffold.
Mesh panel	The front panel of a loading bay gate.
Parallel coupler	Connects two standards which are vertical and close together.
Plan bracing	Bracing under the decking of the scaffold, across the width. Temporary roof: Bracing under roof frames.
Puncheon unit	Allows a standard to be placed without another standard below it.
Putlog coupler	'Single' coupler used primarily for securing boards.
Ramp	Connects some system loading towers to the main scaffold.
Return guardrail bracket	This role is no longer in use.
Return transom	Connects a run of scaffolding with another run at 90 degrees.
Right angled coupler	'Double' coupler used for many purposes.
Roof cover	Cladding for temporary roof scaffolds.
Rubbish chute frame	Connects a rubbish chute to the main scaffold.
Rubbish chute section	A section of the rubbish chute.

Rubbish chute side entry	A section of the rubbish chute, with an opening. Usually placed at lift level.
Rubbish chute top entry	Top section of the rubbish chute, with an opening.
Safety gate	Gate used for external ladder access.
Safety gate guardrail post	Post for connecting the safety gate.
Safety lamp	Safety light.
Safety tape	High visibility tape, foam or sleeve.
Section bracing	Temporary roof: Vertical bracing between beams.
Sole board	A board placed under multiple standards to spread the loading.
Sliding bracket	Cantilever platform bracket used away from the standard positions.
Spacer bar	Reinforces the connection between two frame scaffolding frames.
Staircase handrail	Outer handrails for a system stair tower.
Staircase inner handrail	Inner handrails for a system stair tower.
Staircase unit	Includes the steps and stringers for a system stair tower.
Stairway starter bar	Used for the first lift connection of a frame scaffolding stair tower.
Standard	Vertical leg of the scaffold.
Standard frame	Basic frame of a frame scaffold. Usually includes a built-in ladder.
Swivel coupler	As double coupler, but for non-90-degree connections.
Tie tube	Used to create the connection between the scaffold and the elevation, together with the anchor.
Timber batten shoe	Allows a basic board to act as a system deck for some scaffolding systems.
Toe board	Vertical edge protection decking.
Toe board clip	Connects the toe board to the scaffold.
Top guardrail	A special guardrail used at the top lift for some system stair towers.
Transom for boarded lift	As ledger, but runs in the width direction of the scaffold, at boarded lifts only.
Transom for unboarded lift	As ledger, but runs in the width direction of the scaffold, at unboarded lifts only.
Transom gap cover	Covers gaps near the tubes in the transom direction, to prevent trip hazards.
Vertical end coupler	Connects two tubes vertically. Sometimes known as a sleeve coupler.
Vertical ladder	Fully vertical ladder, not legal in all countries.
Walk-thru frame	A *Frame Scaffolding* frame with space to allow access along the lift.
Wing bracing	As plan bracing, but external. Used primarily for attached tower scaffolds.

Feedback

Thank you for choosing SMART Estimator.

We are always striving to improve the product so please contact us with your feedback. We are always keen to hear new ideas and if you experience any problems with the software we want to hear about them so that they can be resolved.

You can contact us via:

▶ Our website support centre at www.smartscaffolder.com/support.html;

▶ Email on support@smartscaffolder.com;

▶ Telephone on +44 (0)1202 603733 from Monday to Friday between 09:30 and 17:00.