# **A240** HAND BOOK

**ARCKIT** is an award-winning precision architectural model making system that lets you physically design, build, and modify a scaled structure faster than ever before. It's easy to use and quick enough to keep up with even the fastest imaginations.

#### LET'S START BRINGING YOUR PROJECTS TO LIFE.





### QUICK START GUIDE

INTRODUCTION
GET STARTED: COMPONENTS
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### DESIGNED BY ARCHITECTS

We believe that the best canvas for an architect's imagination is a working architectural model. They are a great way to physically explore designs and explain them to clients. The downside to cutting and gluing models is that they can be time consuming, expensive, and difficult to change after building.

ARCKIT is a freeform model making design tool that can be used alongside 3D computer models to powerfully communicate your ideas and bring your designs to life. Our unique system is based on modern building techniques and is completely modular, so you can change it as much as you like. It is also a great way to include your clients in the actual design process.



# DESIGN MODIFY

ARCKIT is a series of interconnecting scaled modular components that allow you to create a diverse range of structures. When you're finished, you can visit our Arckitexture library and download printable realistic textures to add the final touches (SEE PAGE 35).

We will continue to develop new add-on components that can be used with your existing ARCKIT, allowing you to push the limits of your imagination even further. THE POSSIBILITIES ARE ENDLESS.

You can keep up with all the latest product updates and access ARCKIT DIGITAL through the ARCKIT website (SEE PAGE 66).



ARCKIT DIGITAL allows you to use SketchUp versions of ARCKIT components to recreate your ARCKIT designs virtually, using Trimble's 3D Warehouse.

> Go to WWW.arckit.com and sign up today to join the ARCKIT community.

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# **ARCKIT FOR EVERYONE**

ARCKIT is highly practical and uses zero glue, making it a quick and powerful tool for everyone from architects, builders, students, and model hobbyists. How will you use ARCKIT?

ARCHITECTS: The speed and scale of ARCKIT makes it the perfect choice for architects. It can be used to quickly develop ideas, bring 3D drawings to life, and communicate designs to clients.

BUILDERS: ARCKIT offers a quick and affordable model design tool for anyone planning building projects and extensions. It can be continually modified and makes an ideal physical tool for showcasing and discussing projects.



STUDENTS: ARCKIT has exciting potential in the world of education, allowing architecture students to quickly explore unlimited designs, and non-architecture students to learn valuable skills and express their creativity in a fun way.

MODEL HOBBYISTS: Enthusiasts and model makers can use ARCKIT as a next generation, realistic model making system that can be used on its own or as part of other model collections.



10 x Window Picture (3.03)

# **▲240** COMPONENTS





150 x Link (8.01)

32 x Wall Joint (9.01)



32 x Wall Joint Corner (9.02)



12 x Wall Low (2.05)

24 x Wall Railing (2.06)







#### 12 x Column (11.01)

#### 6 x Half Stair (10.01)



#### 36 x Roof Panel 3.6m/12ft (6.02)



### FLOOR PANELS: (1.2M<sup>2</sup>/4FT<sup>2</sup> to scale)

Floor panels are 1.2m/4ft. wide to scale and come in a variety of modular lengths with each module increasing by 1.2m.

Connect floor panels by clicking a link into the two holes on any one side of the floor panel. These holes are also used to connect wall and window panels. Floor panels can also be stacked together by fitting the underside square into the inverted square on the upper side.

## GET STARTED

Every component is made on a standard 1.2m/4ft modular grid to a scale of 1:48 (1/4). This is only fractionally smaller than the 1:50 scale normally used by architects, and makes it easier to convert between metric and imperial.

The additional benefit of scale 1:48 ('O' scale - USA) being a popular scale with model manufacturers means that Arckit is compatible with many other model products such as vehicles, figurines and furniture.

If you're unsure then just remember that one square floor panel represents 1.44m<sup>2</sup>/15.5ft<sup>2</sup>. So, for example, adding up all of the floor panels, A240 has a total of 168 squares, which allows you to build a 240m<sup>2</sup>/2583ft<sup>2</sup> structure to scale.



### LINKS:

Links are used to join two floor panels together. First place one end of the link on the underside of one panel and then on the underside of the adjoining panel. Do the same on the upper side, directly above. Place two sets of links on opposite sides of each panel, or wherever possible.



### WALLS & WINDOWS: (1.2M/4FT. X 2.4M/8FT. to scale)

Wall and window panels have two pegs to insert into corresponding floor and ceiling holes. Window door panels have one peg, so they can open and close. Corner panels have mitred edges, to create a seamless join. Walls can also be used as a support structure instead of columns; two walls back-to-back give discreet support to two floor panels above.



### MID & CORNER WALL JOINTS:

These joints can be used to connect one wall on top of another wall to create extra height, as a ring beam to support pitched roofs, or as a neat finish around the top of walls on open roof structures.



### CORNER WINDOWS: (1.2M/4FT. X 2.4M/8FT. to scale)

Two corner windows can be placed together to create a frameless corner window. These panels can also be placed together along a straight wall to create a large window.



## LOW WALLS:

Low walls can be joined to a wall/window using a wall joint to add extra height to a room. They can also be used to support a stair landing on an outside wall by using two low walls for the outer wall, and a floor panel as the landing. Or complete with wall joints to create a neat finish.

## (1.2M/4FT. to scale)



### STAIRS:

Stair components come in half lengths. This means you can connect them together to make a full flight of stairs. Alternatively you can make U-shaped, T-shaped, or L-shaped stairs by using a floor panel and links between the two sections of stair.





### ROOF TRUSS: (4.8M/ 16FT. to scale)

A roof truss spans four modules and is used to support roof panels, which insert into the holes on the top of the truss. Each truss has one peg either side to connect it to either a floor panel or wall panel using the corner joint. These pegs can also be used for connecting to roof truss extenders.



### ROOF PANELS: (2.4M/8FT. AND 3.6M/12FT. to scale)

Roof panels come in two different sizes, so they can span either two or three modules. Use the pegs on the underside of the roof panels to connect them to the roof trusses. It's best to assemble the roof panels from the top of the roof working down.

### ROOF TILES: (1.2M<sup>2</sup>/4FT<sup>2</sup> to scale)

Roof tiles can be used as a capping tile for completing a flat roof and can also be used as external floor tiles. They have a hollow square on the underside that sits in the recessed squares of the floor panels, standing slightly proud to make room for the links while also creating a shadow gap.



### STRUCTURAL COLUMNS:

These columns can be used aesthetically or as structural support beams.

#### **IMPORTANT! PLEASE NOTE:**

TAKE CARE NOT TO BREAK THE PEGS WHEN REMOVING ANY PANELS. ALWAYS MAKE SURE YOU REMOVE THEM VERTICALLY, AND NEVER LOOSEN THEM BY PULLING FROM SIDE TO SIDE. TO AVOID DAMAGE, KEEP IN SHADE, AWAY FROM DIRECT SUNLIGHT AND AT A ROOM TEMPERATURE NOT EXCEEDING 23°C / 74°F.

## GET BUILDING

#### YOUR FIRST PROJECT

All buildings begin with a floor plan. The first thing you will need to do is construct your floor panels to your desired floor layout. This should only take a few minutes so let's get building.



Turn the floor panels upside down and start by inserting the links so they bridge two floor panels and connect them together. You only need to do this at opposite ends of the panel to give enough support.

Turn your floor panel back

over and place additional links

directly above the links you just

are no golden rules to this, so

to give support.

add as many links as you need

inserted on the underside. There



#### LAYING THE FLOOR

Once you get going, you may find it quicker to extend the floor area by attaching the link to the underside of the floor panel before placing it down. Then you can simply place the next floor panel down straight on to the link to join them. Just don't forget to go back and add links to the upper side. From the first floor level onwards, links are inserted only where you feel support is required. If a link gets in the way of a wall panel, simply relocate the link. If you are planning to apply an Arckitexture image to the floor then it's best to apply links to the underside only, to give you a flat floor surface.

Alternatively, you can link floor panels using the inverted and protruding squares on each panel to push the floor panels together. This creates a stand-alone link-free ground floor base using two or more panels as support beams on the underside.











Push floor panels together to create stepping and outside landscaping.

#### BUILDING THE WALLS

Connect wall and window panels to the floor by gently inserting the pegs into the holes in the floor panels. To disassemble, vertically lift the wall and window panels being careful not to damage the pegs.









To build internal walls you will need two mitred wall panels for where the inner and outer wall meet. This allows the internal wall to seamlessly join the outer wall panels.







#### WINDOWS AND DOORS

The window/door panel has only one peg at the top and bottom, allowing the doors to open as long as they are next to the mitred side of a wall. Window/door panels are mitred on both sides, making them versatile enough to be used as a corner window, a full height window, or a door within a wall.







#### CORNER WINDOWS

Window panels can be joined to create frameless corner windows, or placed together on a straight wall to create a large window.





#### USING LOW WALLS

Low walls can be used to create added height to a room by using wall joints as connectors.



Low walls can also be used to support a stair landing on an outer wall or to create a solid balcony railing using wall joints as capping.





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#### STAIR COMBINATIONS

Join two half lengths of stair together to create singe rise stairs.





U-shaped stairs can be made by joining one half stair to a floor panel using a link, and inserting the pegs of another half stair to the same floor panel. You can remove low walls to create a cantilevered landing.



L-shaped stairs with landing.







#### USING WALL JOINTS

Wall joints can be used to give a neat finish to an open room or enclosed external space. Start by fitting the corner wall joints, and then use the lengths of wall joint around the tops of the walls, overlapping two wall panels to give structural support.



Wall joints can also be used as a ring beam to support a pitched roof. Use corner wall joints for all parts that connect directly to a roof truss. You can extend a roof truss by adding left and right roof truss extenders to the bottom of the roof truss.



Use wall joints to connect walls and windows on top of one another, to create added height or multiple height spaces.







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#### FITTING ROOF PANELS

Remember to make sure the roof panels are positioned the right way up (indicated on the underside of each panel) before fitting them directly to the roof trusses. It's easier to start fitting the roof panels from the top and work your way down. You can also create openings in the roof by removing panels.





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Arckitexture gives you access to a digital image library of surface textures and material patterns provided by real building material companies. This allows you to add detailed and realistic finishes to your structures such as wood flooring, terracotta tiles, stone walls, and shingle aluminium. We will be continually adding to the Arckitexture library, so check back regularly.



### THE FINAL TOUCHES

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The full library of Arckitexture finishes can be downloaded from the website and printed to the adhesive Arckitexture sheets provided. Just print, measure, peel, and stick them to your model.

- Access an image library of real building materials
- Create finished models with realistic renders
- Customise models and express your unique designs

Sign up at www.arckit.com to become a member today.

IMPORTANT! Inkjet printer required! Images from the Arkitexture library may vary in quality depending on your printer. MBM Building Systems assumes no responsibility and shall not be liable for any damages caused to printers by the use of Arckitexture adhesive sheets provided by us or purchased elsewhere.





















# INSPIRE AND BUILD

ARCKIT is a freeform model making system that encourages the exploration of architecture through form, space, light, structure, section and material. As such, every structure is unique.



There are many different ways to begin building your ARCKIT model, and there are no set instructions. Just think of this section as inspiration, to help get you started, and an assembly guide to build the A240 house above.





































# A DIFFERENT PERSPECTIVE

# INSPREAND BUIDA





Inspirational Structure - Additional components required



Inspirational Structure - Additional components required





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ARCKIT DIGITAL allows you to recreate your ARCKIT structures within Trimble's 3D Warehouse using SketchUp versions of the ARCKIT components.

This makes it possible for you to develop virtual and real versions of a design using the same ARCKIT model building techniques.

Assemble a virtual recreation of your ARCKIT model. Share your designs with friends and colleagues. Calculate the components and quantities necessary to physically build your ARCKIT designs. Go to www.arckit.com to learn more and to access ARCKIT DIGITAL.













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# **A120**









# ARCKIT®

### THE FUTURE

ARCKIT is a completely revolutionary concept in the area of architectural model making. We have received overwhelming positive feedback from industry experts, architects, universities and schools, model hobbyists, and consumers at international shows and conferences. This is just the beginning. Here are just a few developments we will be working on for future release:

- Individual packs of components to add to your existing ARCKIT.
- A larger library of ARCKITEXTURE images for you to print & stick.
- ARCKIT DIGITAL function to calculate and order exact component quantity to make a physical version of your design.



You will also be able to send us your feedback, share your designs with the ARCKIT community, purchase new products, keep up with our latest news, and enter future competitions. **KEEP IN TOUCH AND HAVE FUN!** 





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#### **Returns Policy**

If for any reason you are not entirely satisfied with your order, please get in touch with us. The returned products must be substantially in the same condition and quantity as delivered by ARCKIT.

Unopened Items: We can exchange or give you a full refund for the products(s). Opened boxed products(s) may be considered for a refund where ARCKIT Products are left intact in their exact original packaging including the clear bags which house components.

Opened Items: Open ARCKIT sets can only be returned for exchange.

All returns and exchanges must be made within 30 days of receipt of your order and must be accompanied by a Return Authorization Number (RA – number) which we will provide you with when you get in touch.

You can go to **www.arckit.com** to review our full returns policy.

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# START TO MAGNE T. BUILD T.



The ARCKIT Project is dedicated to Andrea Murtagh Le grá.

