

WHAT WORLD WILL YOU MAKE REAL?

TerrainLinX™



www.worldworksgames.com

TerrainLinX™

To a Very Dedicated Crew

TerrainlinX would not exist today if it weren't for the tremendous efforts of a small handful of dedicated testers. They endured many revisions and hardships, costing them both materials and time but through it all they helped us with a smile (and made fantastic suggestions along the way!). We would like to send out a VERY special word of gratitude to the following people. You guys did absolutely amazing work and we are forever in your debt!

Our BetaTesters

David "LD2062" Yaklin – Alpha/Beta testing and construction, consultation, Additional promotional photography for Sewers.

John C. "Highland_Piper" Morrison – Alpha/Beta testing and construction, consultation, GSD development and creation.

Matt "Kane" Razincka – Alpha/Beta testing and construction, consultation.

Christopher "Mel Ebbles" Roe from <http://www.ebblesminiatures.com/shop/index.php> – Beta testing and construction, GSD development and consultation.

Stephen "Lord Wormwood" Rodger – Beta testing consultation.

TerrainlinX Developed by

Denny Unger – Original concept, system design iterations and graphic design.

Matt Lyon – Additional system development and consultation.

Special Thanks

To our community at WorldWorksGames.com, to our families who continue to support all of this madness, to Matt Lyon for believing in the possibilities and helping make that dream come true, to Bob Cooper, Daphne Leavitt and Tracey Unger for helping maintain quieter aspects of the business and to the dedicated few who spread the WWG word out there in the wilds of the internet and in the real world at large. THANK YOU!



www.worldworksgames.com



What is TerrainlinX?

www.worldworksgames.com

TerrainlinX is about possibilities!

Over the last 7 years **WorldWorksGames** has spent much of its time experimenting and innovating new standards in gaming terrain. We've been on a very long quest to find a terrain system that attacks the most commonly discussed issues. Something which crashes through limitations and opens new worlds of endless possibility to the end user.

Being gamers ourselves, we believe we've found our "dream" terrain system in TerrainlinX. The benefits are enormous and once you fully wrap your mind around the concept we hope that you to will share in our dream.

What makes a winning terrain system?

- **TOTAL "ON-THE-FLY" MODULARITY!** Complete on-the-fly modularity. Change layouts as you play, expand or reduce layouts easily. No limits layout design, nothing locked down, change it!, move it!, ultimate flexibility!
- **MULTI-LEVEL STRUCTURES, EASY ACCESS LAYOUTS!** Create multi-storied structures which can be lifted off securely and placed to the side to gain access to lower levels in real-time. Employ basements, sewers, dungeons, streets, buildings all within the SAME layout and access them all with ease! Remove individual walls for access to tight areas!
- **STABLE, BUMP-PROOF LAYOUTS!** Bump-proof tile and wall connections. Our linX connectors, anchor and post system secure and stabilize your layouts. Create an endless variety of secure footprints and floor plans without worrying about things falling apart!
- *** ANTI-WARP WALLS!** Anti-warp wall design! Specially designed walls offer razor sharp angles and warp free surfaces thanks to our exclusive anti-warp ledge design.
- **HOTSWAPPABLE COMPONENTS!** Components swappable with all other TerrainlinX releases! Everything has been standardized from the bottom up! Mix and match walls & floors on-the-fly to create completely original terrain combinations. No "kitbash" experience necessary!
- **COMPACT STORAGE!** All elements store flat or very close to it! Organizing and storing your terrain has never been easier!
- **AUTOMATED MACHINE CUTTING COMPATIBLE!** Compatible with consumer market machine cutting for extremely fast core component fabrication. (Currently CraftRobo and Silhouette SD compatible). Increase your build speed by letting a machine do 90% of the work for you!



www.worldworksgames.com

TerrainlinX is a trademark of worldworksgames.com . All Materials Copyright 2009 worldworksgames.com . All Rights Reserved.

TerrainlinX™



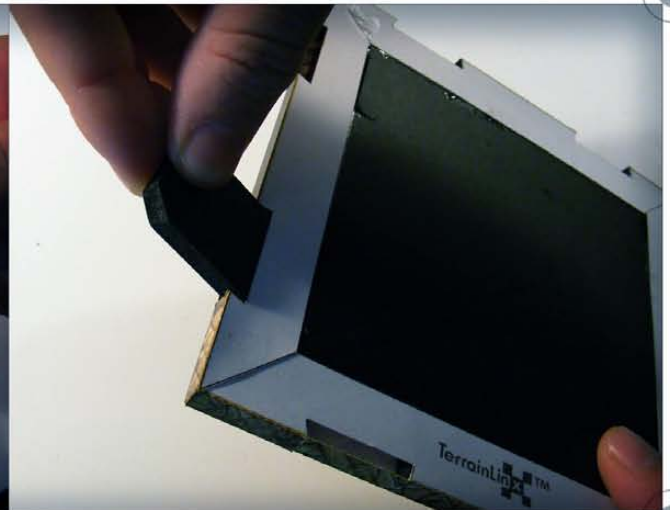
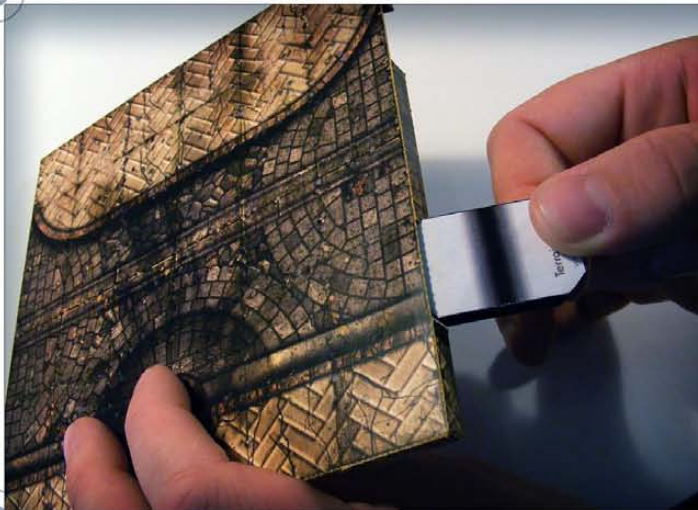
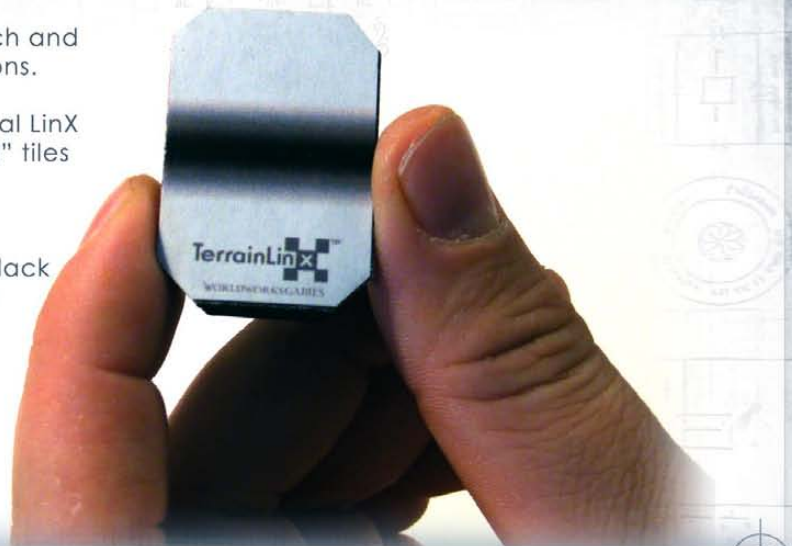
How to Use TerrainlinX

www.worldworksgames.com

The TerrainlinX "LinX tabs" are designed to attach and secure adjoining tiles in a number of configurations.

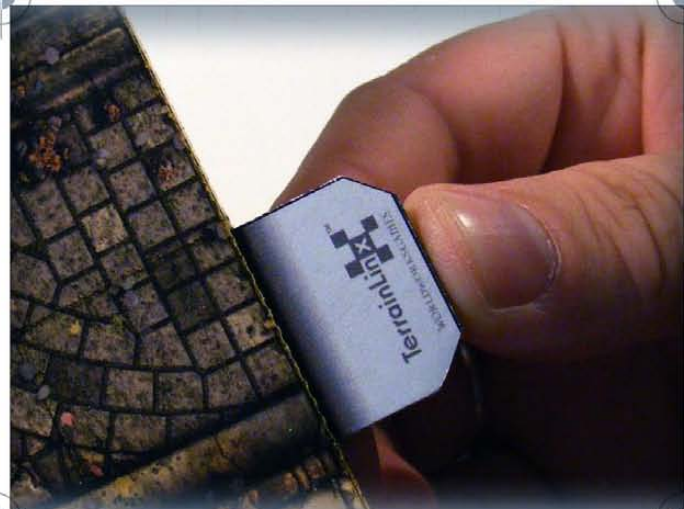
Each 6"X6" tile can accommodate eight potential LinX tabs. 3"X6" tiles accommodate six tabs and 3"X3" tiles accommodate four tabs.

LinX tabs are tapered at each corner to permit smooth insertion on large connection runs. The black strip down the center aids in concealing the tab should any small gaps between tiles appear.



When inserting a LinX tab for the first time you should always go slow and easy. As with any freshly constructed element, it takes time for things to "work-in". **It is extremely important that you guide your tab into the tile slot at an upward sweeping angle. If this is your first time, try inserting the tab from the back until you are comfortable with this process.** This angle of attack pushes the slot concealment flap up into its hidden position within the tile but more importantly it prevents the tab from snagging on the slot lip.

Once you've cleared the slot lip, push your tab into the tile until it hits the back wall of the tile core.

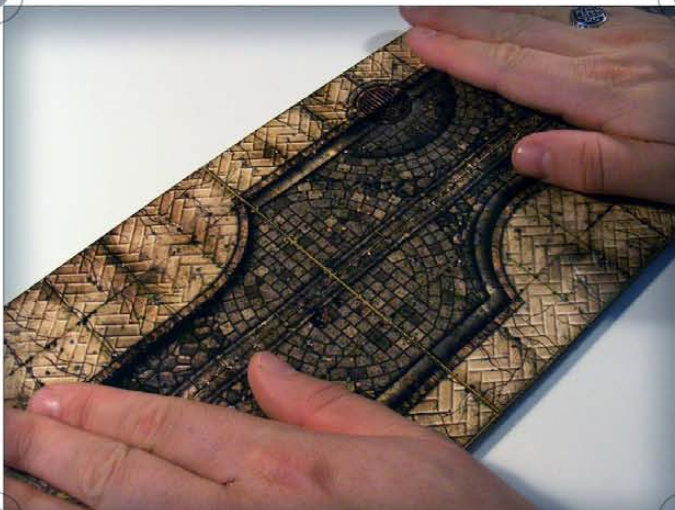




How to Use TerrainlinX

www.worldworksgames.com

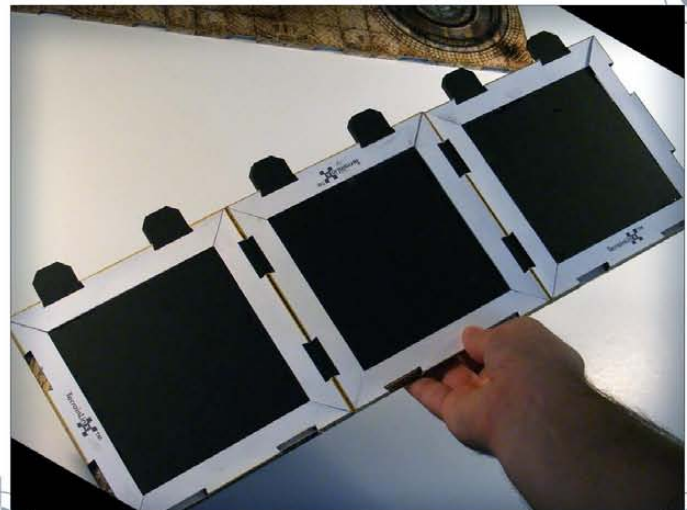
When connecting two 6"X6" tiles, you'll need to slot two LinX tabs. Again, you must ensure that you are using that upward sweeping angle to prevent any snagging.



Once you've partially inserted your tabs you can place the tiles flat on your table and move them towards one another until secure.

When starting your "run" of tiles it is suggested that you create a small row of three tiles. We've found that when building up larger layouts, this ratio helps to keep things from becoming cumbersome and difficult to manage. You'll experience difficulty if you try to exceed this ratio and you may not be able to successfully connect larger runs of tiles without causing damage to the system.

Once you've joined all three tiles insert six connectors to one side of the row.



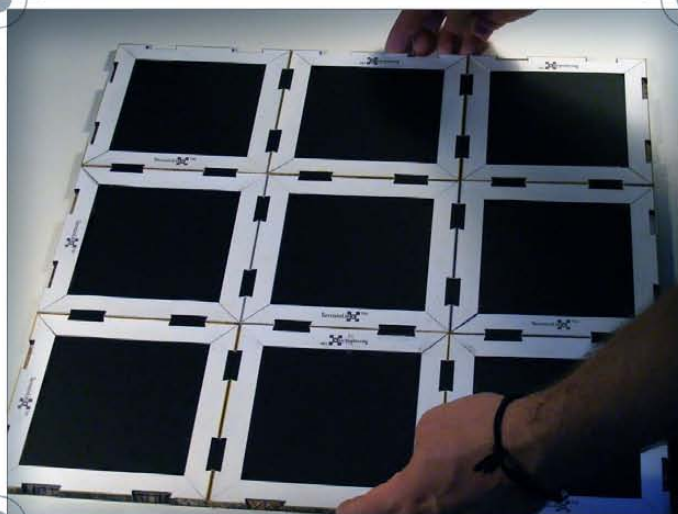
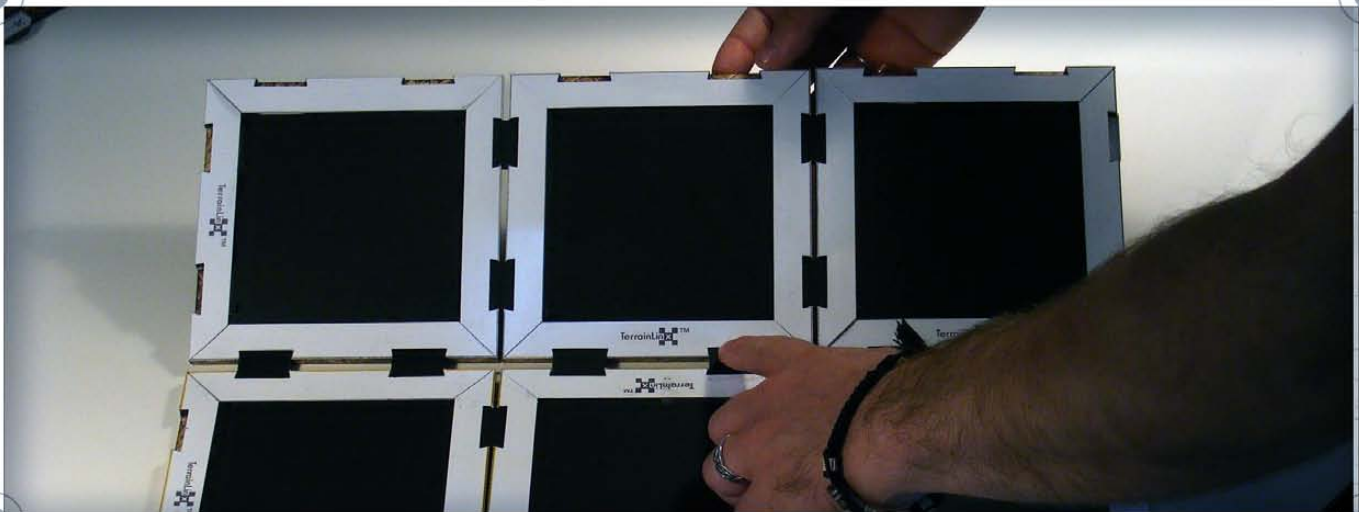
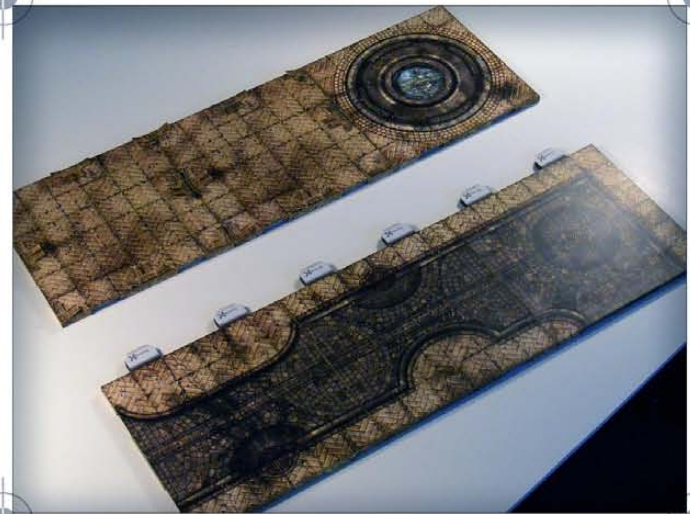


How to Use TerrainlinX

www.worldworksgames.com

Now that you've prepared your first row, construct a second row of three tiles following the previous steps.

At this point you may find it easier to flip over your two rows for insertion. By laying one row on the table, you can angle in your second row and carefully ensure that each tab is clearing the slot lip. Once you've ensured everything is aligned, fully seat your second row to the first.



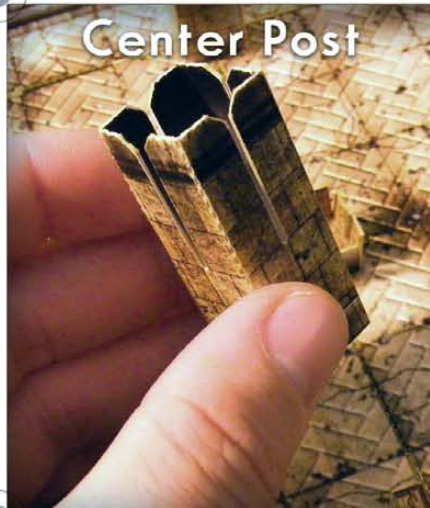
Repeat the above process until you've created a 3X3 tile block. This represents the largest module you should work with at any one time. You can now add additional 3X3 tile blocks to your first or layer additional single rows to this foundation.

Remember to leave certain tile runs disconnected from the main grouping if you want to create an area which is easily removed during play (sewers, basement, sub-levels).



How to Use TerrainlinX

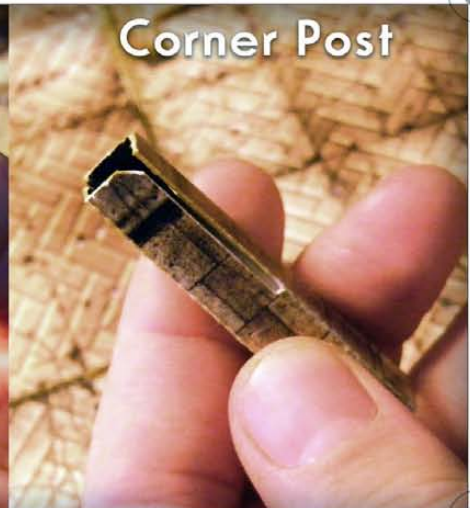
www.worldworksgames.com



Center Post



Side Post



Corner Post

Now that you've constructed your play area we can focus on building structures. There are three primary post types used in the TerrainlinX system. These are: center post, side post and corner post. Posts come in a number of different slotted configurations (8-way, 6-way, 4-way, 3-way, 2-way).

Posts slot down onto anchors (though that's not always necessary). Anchors are attached to tiles and lay flat when not in use. Depending on the type of post you are using, a different number of anchor "arms" will need to be inserted into the base of the post. 8 arms for the center post, 4 arms for the side post and 2 arms for the corner post. Simply lift the needed anchor arms and plug your post down onto the anchor.

Anchor



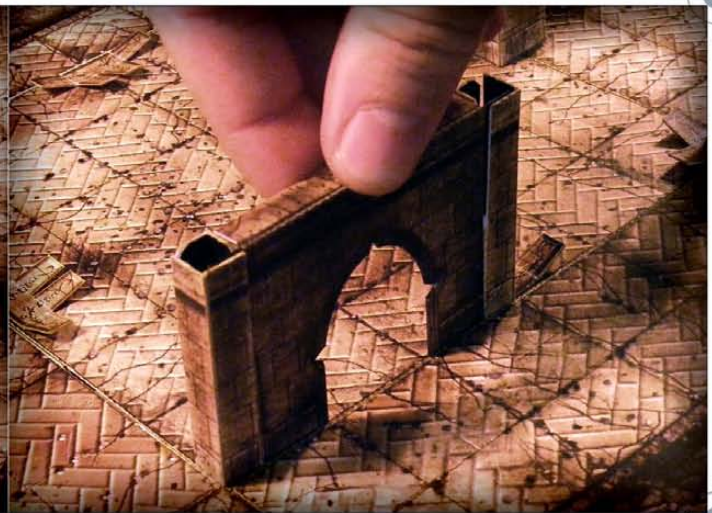
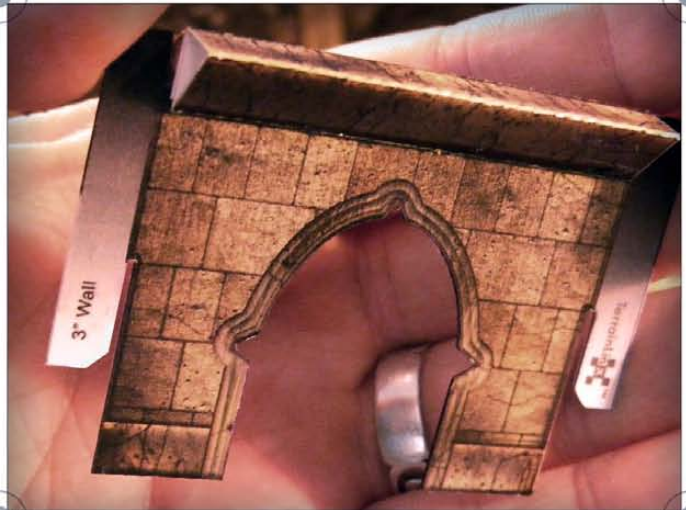


How to Use TerrainlinX

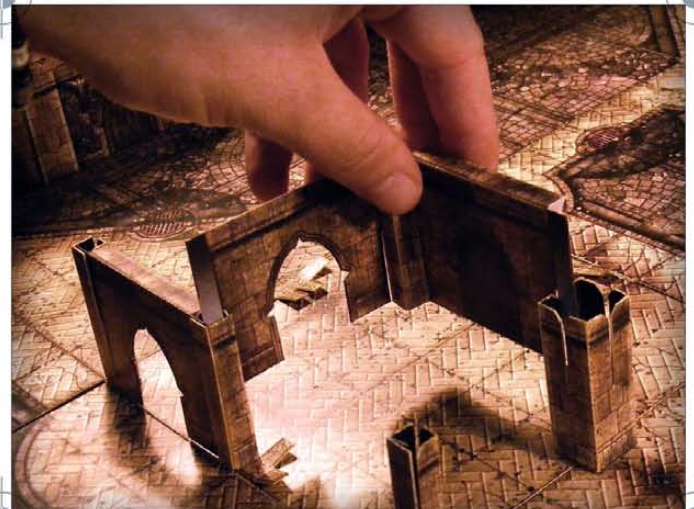
www.worldworksgames.com

TerrainlinX walls come in two flavors "flat fold" and our special "anti-warp" ledge design. The flat fold walls are extremely quick to build and are great for filling out complex interior structures. The anti-warp version does a terrific job of keeping walls warp free but it also acts as a support for upper levels. You can use a combo of both variants to build your structures.

Each wall has specially slotted arms with tapered corners. These simply slide down into your anchored posts. Depending on your placement you may have to wiggle them a bit but for the most part they should smoothly slot down into the posts. Don't force them and always remove them carefully to prevent damage to other structures.



In situations where there are no anchors present (like this inside corner) simply connect two walls to a free-floating post. You can then connect that structure to the other posts as normal. So long as there are other anchored points within the structure, you'll find that these areas are just as stable.



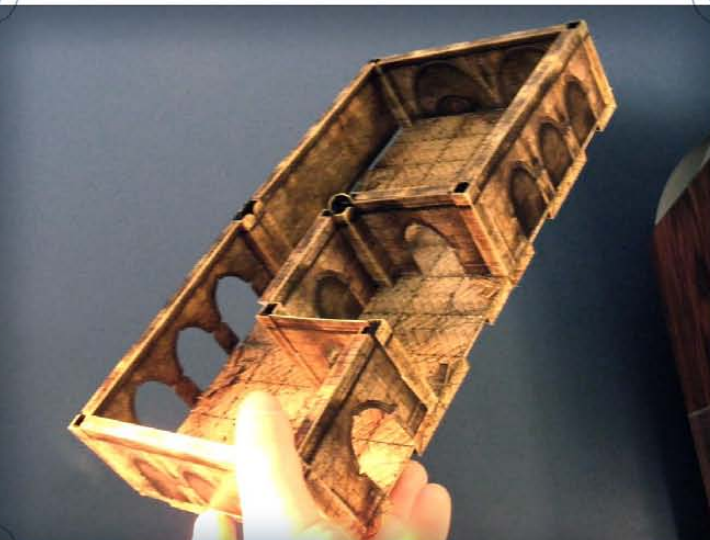
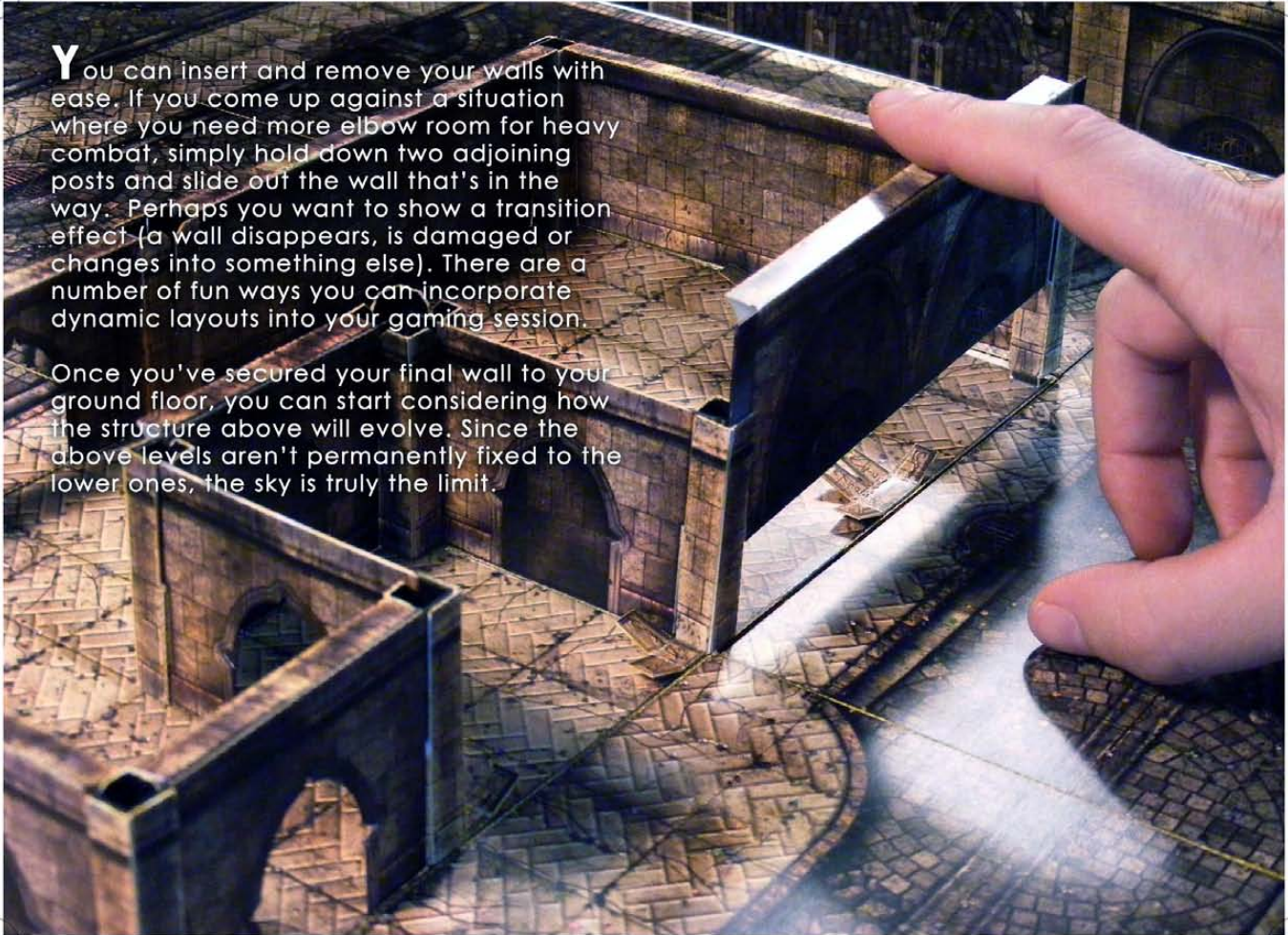


How to Use TerrainlinX

www.worldworksgames.com

You can insert and remove your walls with ease. If you come up against a situation where you need more elbow room for heavy combat, simply hold down two adjoining posts and slide out the wall that's in the way. Perhaps you want to show a transition effect (a wall disappears, is damaged or changes into something else). There are a number of fun ways you can incorporate dynamic layouts into your gaming session.

Once you've secured your final wall to your ground floor, you can start considering how the structure above will evolve. Since the above levels aren't permanently fixed to the lower ones, the sky is truly the limit.



You'll also note that once you've secured your posts and walls, that the entire structure has become a rigid solid. This self-supportive property of TerrainlinX allows you to easily pick up your entire structure and place it to the side or move it to another location for access to other areas.

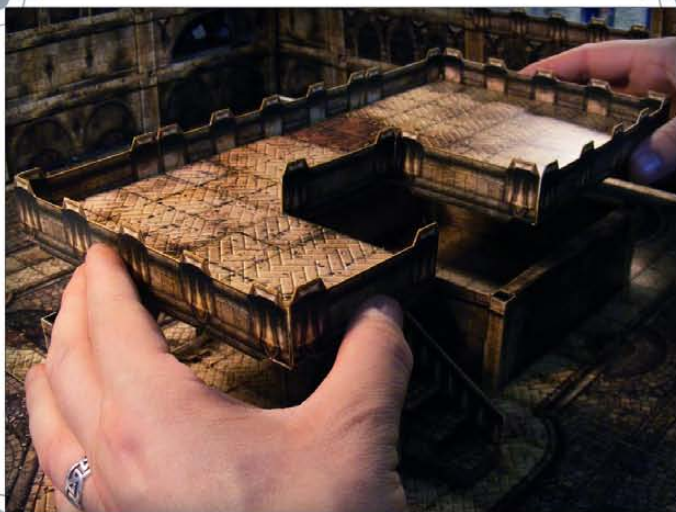
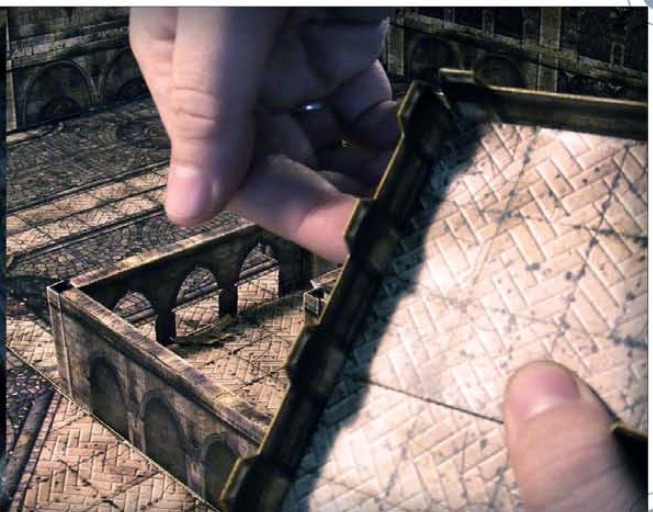
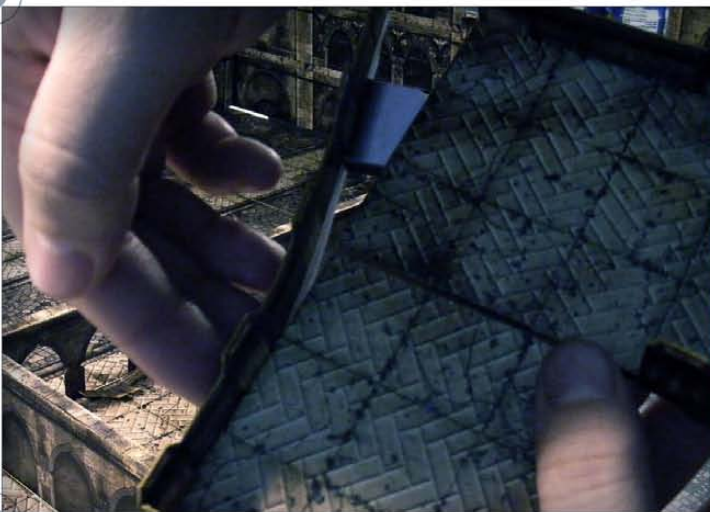
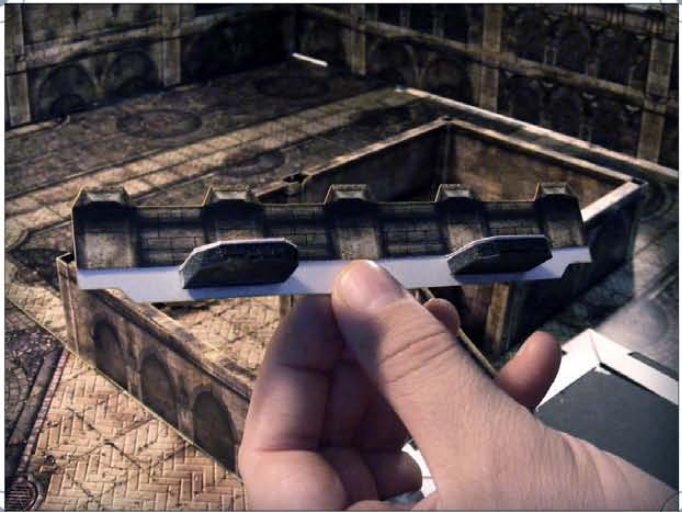


How to Use TerrainlinX

www.worldworksgames.com

TerrainlinX comes with unique plug-in railings (3" and a 6") which can skirt the outside of upper structures. Not only do they add a visual aesthetic, they provide a slip-proof anchoring to the below structure via a short lip which projects downward, hugging lower walls.

Railings are inserted much the same way as standard LinX tabs. Insert the first tab about half way and then begin to insert the second tab. Once both are aligned, push them into their final position. When removing your rails be careful to only pull from tab locations. Attempting to remove rails by gripping the center of the rail and pulling may cause damage.



Once you've applied rails to your second level, carefully lower it down onto the first.

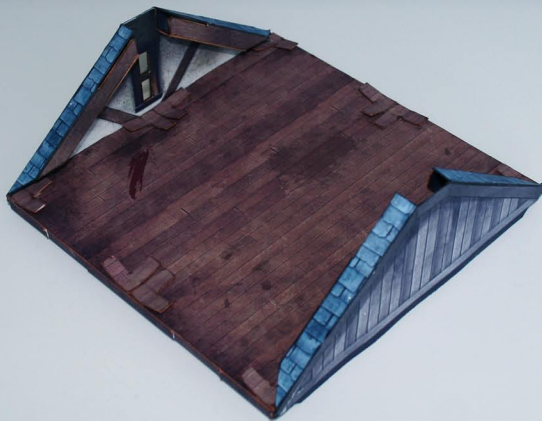
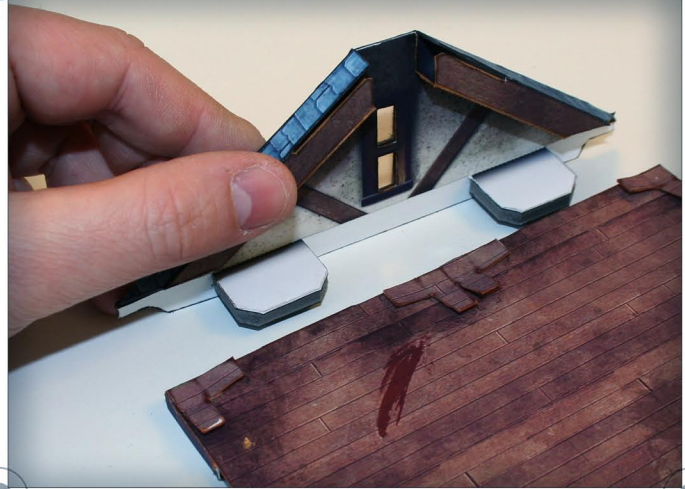


How to Use TerrainlinX

www.worldworksgames.com

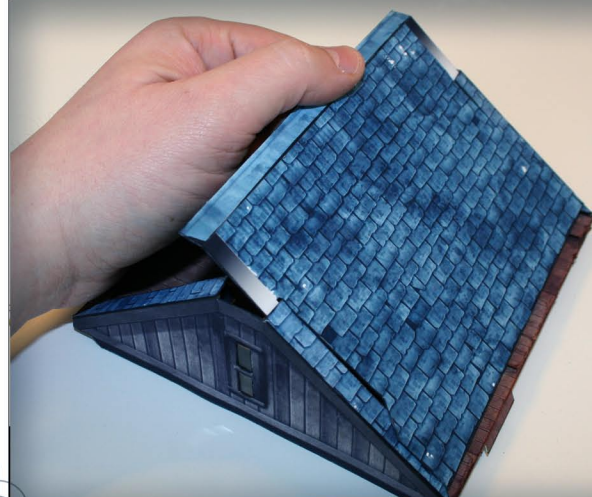
Terrainlinx has a unique roofing system which allows you not only to put a roof on any kind of building, but which also allows you to take away parts of the roof panels so you can play in the attics, hunting for hidden treasure.

The end trusses work much like railings. You slide one tab slightly into the slot at the side of a tile. Then you slide the other tab in. Once they are lined up, you push the truss completely in.



Repeat this process on the other side of the roof you wish to make.

Now it is time to slide the roof panels in. This is really much the same as sliding a wall between two posts. If you slide it all the way down, the wider section of the roof will "lock" under the underside of the trusses.





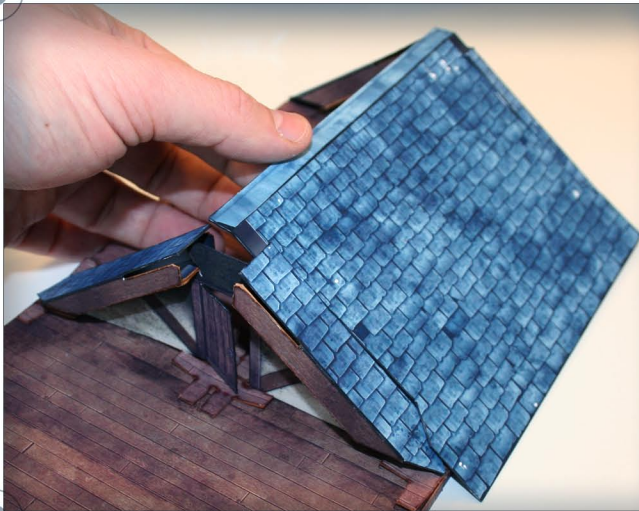
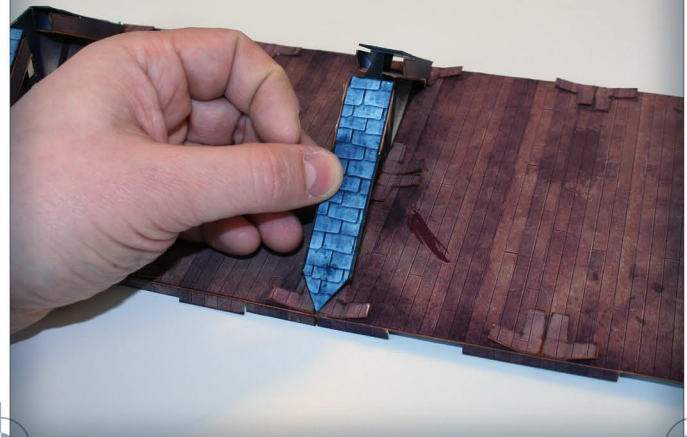
How to Use TerrainlinX

www.worldworksgames.com

For those who want to build bigger roofs, TerrainlinX includes 2-way posts. You can use these to connect 2 roof panels.

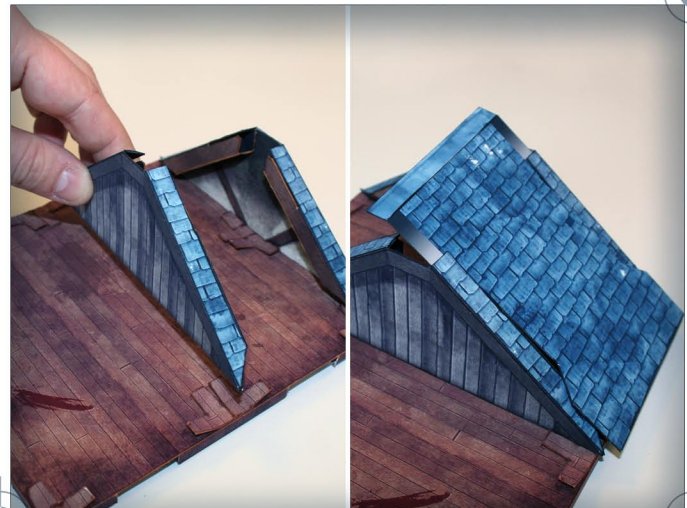
The 2-way trusses are not attached to the tiles in any way. This way, you can put the 2-way truss anywhere, even in the middle of a tile.

You just hold the truss with one hand, while you slide the roof panel on one side in.



Once the roof panel is slid halfway in the trusses, you can let go of the 2-way truss. It will keep its position thanks to the roof panel.

There are also 1-way trusses included without end-tabs. These are ideal when you want to make some sort of terrace. Just like the 2-way trusses, you can put these anywhere. And just like the 2-way trusses, you have to hold them in one hand while sliding the roof panel in with the other.



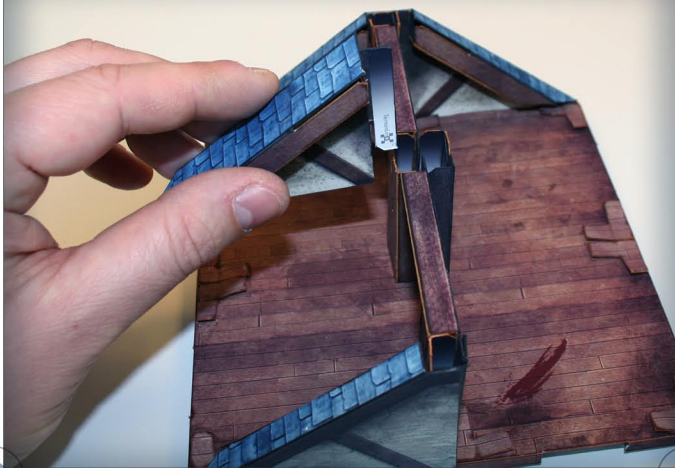
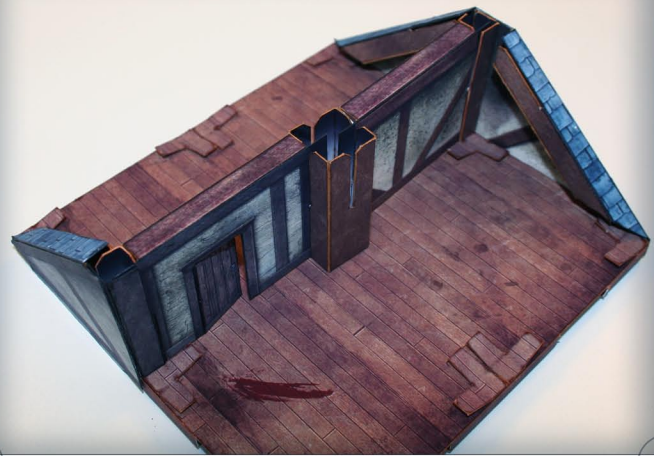


How to Use TerrainlinX

www.worldworksgames.com

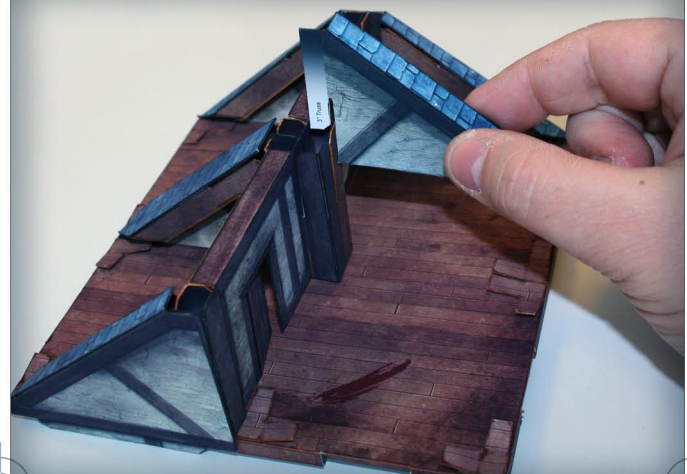
The trusses and roofs can be perfectly combined with posts and walls. This allows you to put more detailed structures in your attics.

Putting a wall under a roof really reinforces the top ledge of the roof, which might come in handy if you want to put models on there for some nighttime rooftop fighting.



Just like with its 6" counterpart, you can use 3" 2-way trusses to connect 2 roofpanels. Unlike the 6" version however, you have to slide the 3" version into a post.

The same goes for the 3" 1-way trusses. These really come in handy when you want to create terraces and the likes.



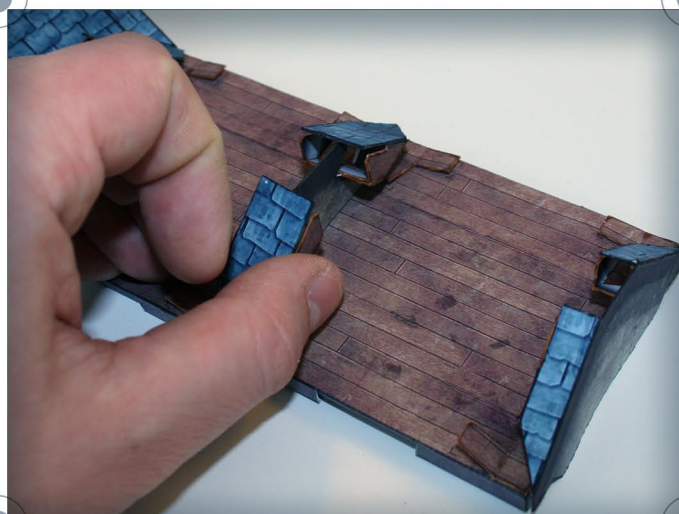
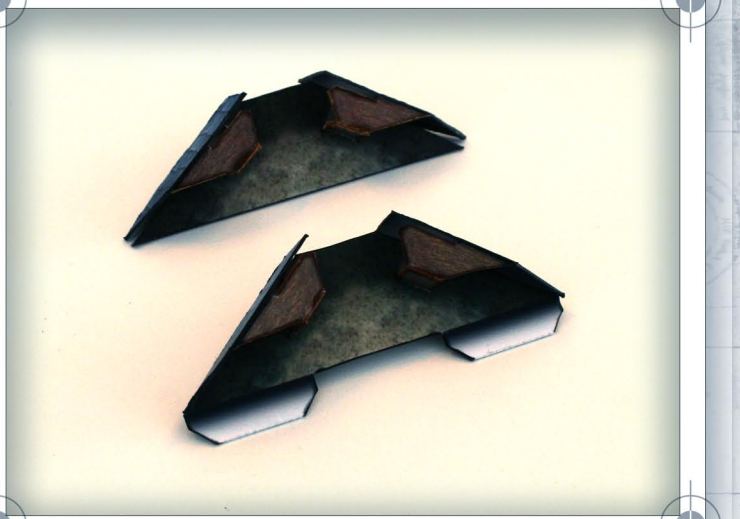


How to Use TerrainlinX

www.worldworksgames.com

The small roofs work exactly like their bigger counterparts. There is one exception though.

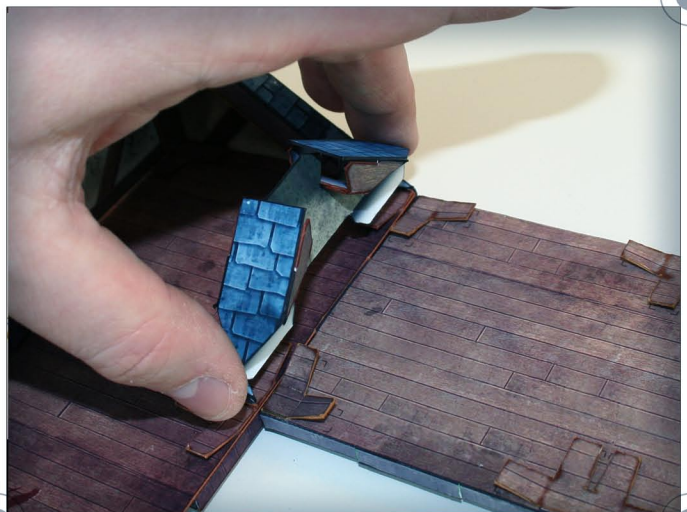
For the 2-way trusses, we've included 2 variants, one with little flaps extruding from the bottom and one without them.



The small 2-way truss without the little flaps is used in exactly the same way as the big 2-way trusses. You can put these anywhere on your floor, even in the middle of the tile.

If you want more stability for your roof, you can use the 2-way truss with flaps. These can only be positioned where 2 tiles meet.

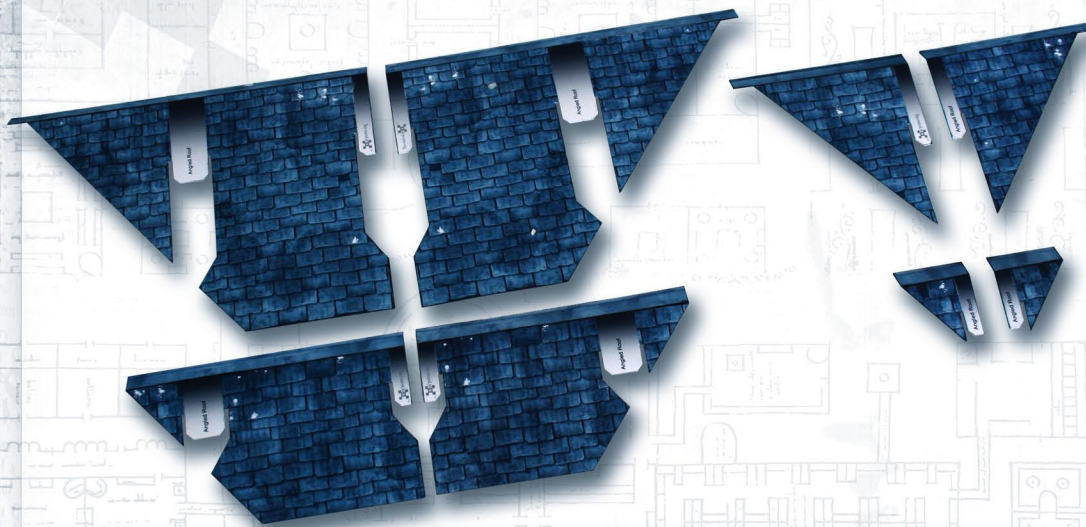
You have to pull the tiles a little bit apart, creating a small gap. Then you put the flaps from the truss into this gap. Push the tiles back together and you're good to go!





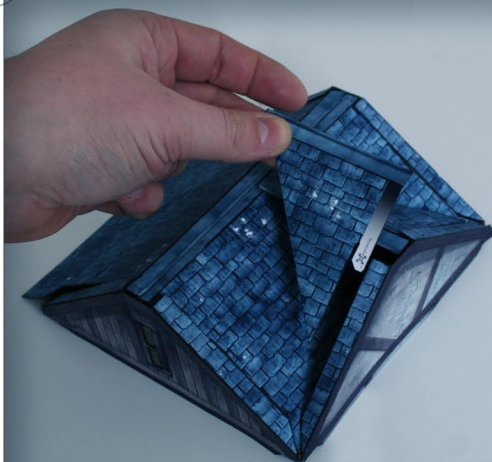
How to Use TerrainlinX

www.worldworksgames.com



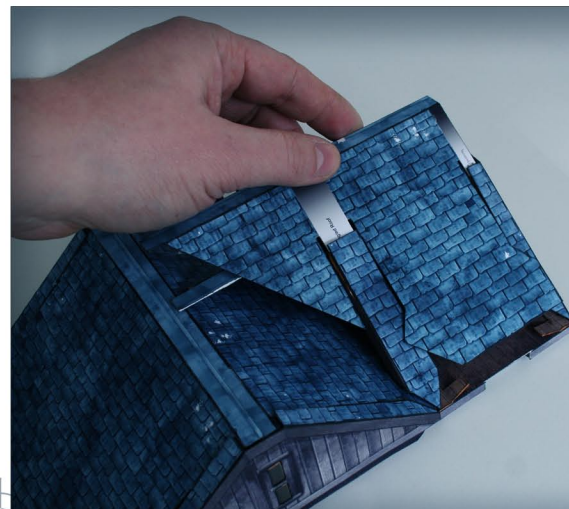
The TerrainlinX roofing system includes special panels that allow you to let roofs meet at an angle.

Both the regular roofs and the small roofs come in an extended and a normal version.



The normal angled roofs slide into the trusses just like a regular roof panel.

Extended angled roofs need a 2-way post to make them work. Put a 2-way post next to the roof you want to create an angle with and slide in the roofpanel.





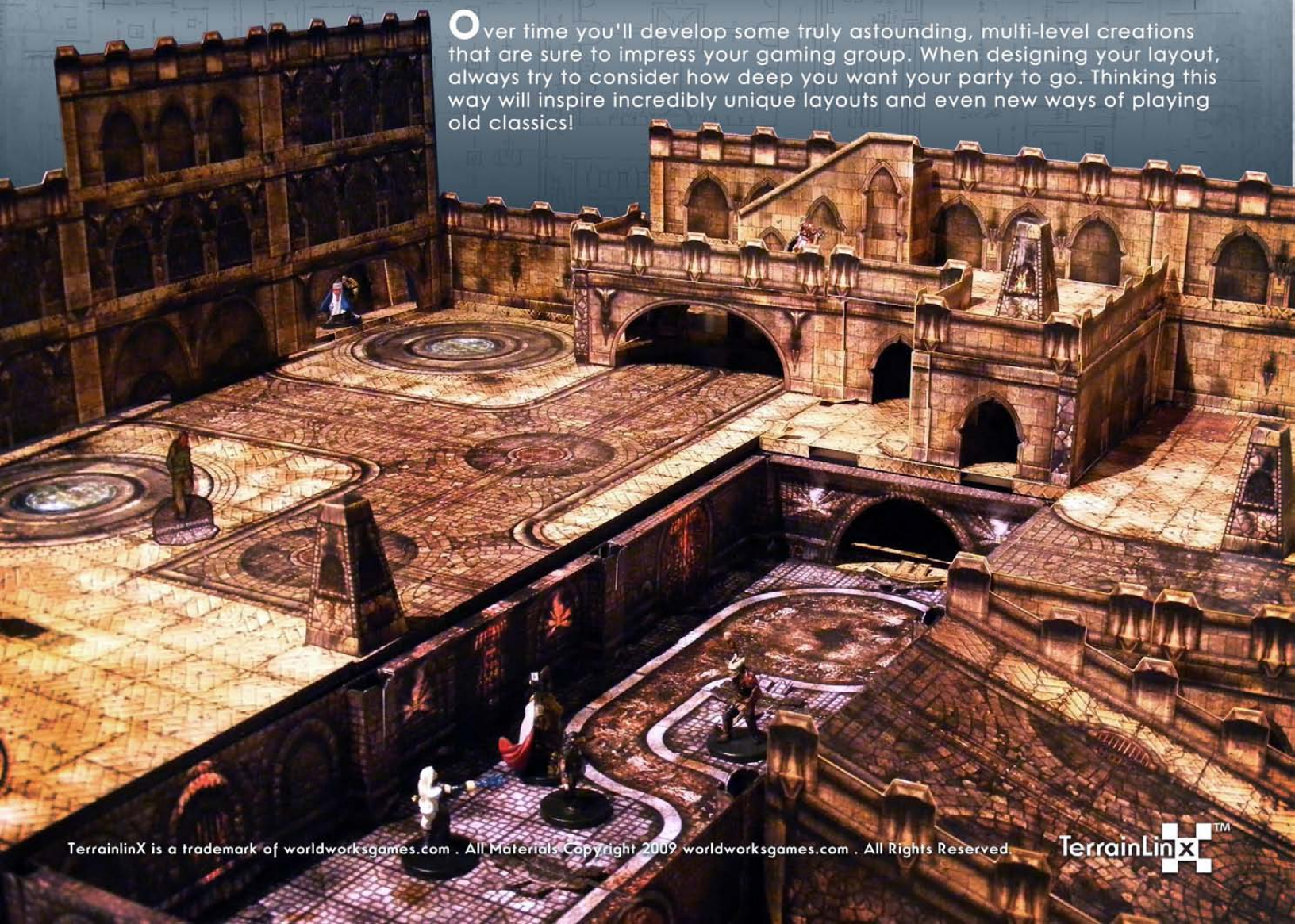
How to Use TerrainlinX

www.worldworksgames.com

You can continue stacking levels this way to towering heights if you wish. The more you construct, the larger and more complex your potential layouts will become!



Over time you'll develop some truly astounding, multi-level creations that are sure to impress your gaming group. When designing your layout, always try to consider how deep you want your party to go. Thinking this way will inspire incredibly unique layouts and even new ways of playing old classics!





How to Use TerrainlinX

www.worldworksgames.com

Whether packing up for the big game or packing it in for the night, TerrainlinX breaks down into nearly flat components and stores easily. No more awkward, large pieces to deal with. Place posts and connectors in sealable bags and throw the whole thing in a gaming box or plastic storage container. It really is that simple!

Granted, your collection may grow beyond a single storage box ;)

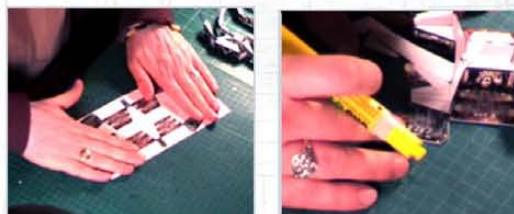


www.worldworksgames.com



Video Tutorials

Be certain you have the right tools & techniques for the job. WorldWorks has gone to great lengths to produce free tutorials covering the core methods and materials used in cardstock modeling. You can download a free "Beginners Guide" at our store or watch full video tutorials on this topic by visiting www.worldworksgames.com and clicking on "Tutorials" from the top menu bar.



Basic Materials

WorldWorks recommends 8-1/2" X 11" 110lb cardstock or 80lb coverstock for strong model construction, a cheap utility or hobby knife, extra blades, a metal cork backed ruler, and an assortment of felt markers (Black, Grey & Brown).



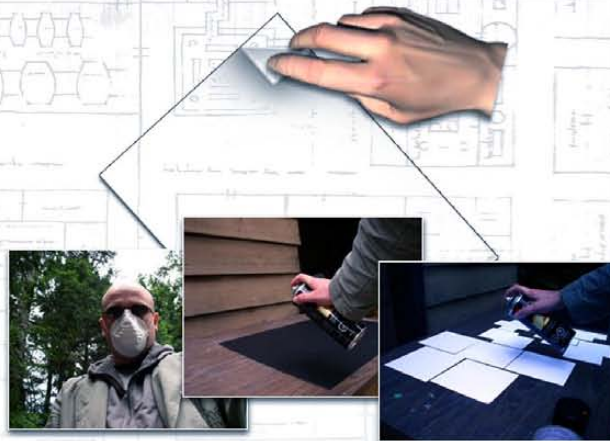
Glue & Gluing Options

Gluing options break down into 3 basic techniques; Spraymount, Gluepen & Adhesive Papers.

Gluepen: For walls & props, use a **low water content** gluepen, gluestick or bottled glue specialized for paper-craft. The only way to prevent warping is to ensure that your glue is specifically designed for use with paper. Most hobby and office supply stores carry papercraft glues.

Adhesive Paper: Useful for mounting tiles, these full 8.1/2"X11" sticky backed sheets of printer paper can be found at most office supply stores or online. Adhesive paper allows you to print your pages, cut them out and then "peel & stick" each tile down with limited fuss.

Spraymounting: Another technique for tile mounting involves the use of adhesive spray found at your local craft or hardware store. In an adequately ventilated room (or better yet outside) each page is sprayed on the reverse side and left to dry. The mounting surface itself is then given an additional light spray and left to dry. When the two surfaces come into contact there is an instant bond.



Foamcore Mounting

The first thing you need to consider when building your floor tiles is finding a good material to mount them on. WorldWorksGames recommends foamcore (display board). This typically comes in 20" X 30" sheets and can be found at your local craft or office supply store. For this project you'll need either 1/4" or 3/16" thick foamcore.





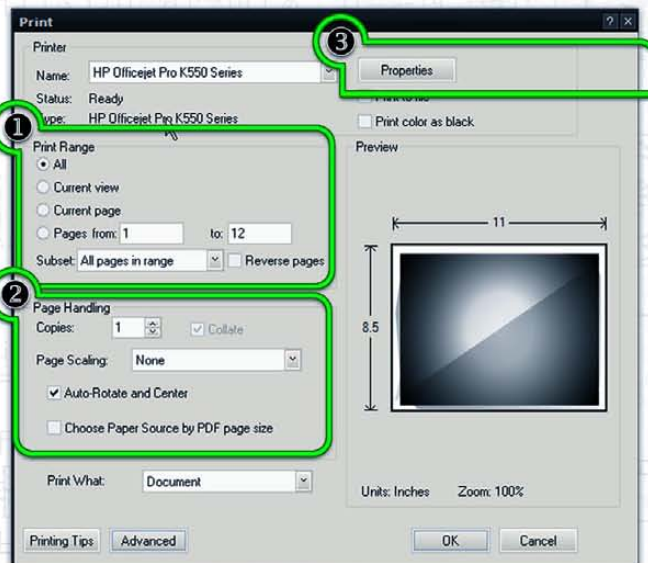
Printer Settings

Typically beginners to the hobby overlook the importance of "clean printer settings". It is vitally important that you adjust specific settings in your print dialog BEFORE printing, otherwise your models will print at the wrong scale or with generally poor clarity and color depth.

1. In figure 1 we see the "Print Range" settings. Typically you will leave this set to "All" (which will print every page in a document) but there are some instances when you'll want to print a specific page. In this case you'll click "Pages from:" and then enter the number of the page or pages you want to print in each box. So if you just wanted pg.5 you would enter "5" in both boxes.

2. "Page Handling" is extremely important. This is where MANY people tend to make mistakes when printing. Make certain that "Page Scaling" is set to "None". If you choose any other setting your model pages will print at the wrong scale and this could affect your build. Leaving "Auto-Rotate and Center" checked is usually acceptable as this does not change the inherent scale of the page.

3. "Printer Properties" are a bit more difficult to nail down as each printer runs on unique software. The key areas to focus on here are proper paper type and quality settings:



Paper Selection:

You might think that selecting "cardstock paper" from the list is the right thing to do but you'd be wrong. This will result in poor color range and muddy, posterized prints. **Instead, leave your paper type set to "Plain Paper" for the best image clarity results.**

Print Quality:

Adjust your "Print Quality" to best or highest (depending on your software settings) for optimal print clarity and detail. Medium or Average settings will extend your ink usage but result in lower quality prints. Do some experimentation here to determine which settings work best for your needs.

\$AVE MONEY ON YOUR PRINTS!

WorldWorksGames suggests money saving ink-refill solutions. Many companies offer affordable refills of brand name printer cartridges as well as custom refill kits. With these products you can reduce your "per page price" to pennies a page.

- Refill kiosks can be found in your local shopping mall. No muss, no fuss but a bit expensive.
- Ink injection systems can be found at your local office supply & craft stores. A bit messy and tricky to get the hang of but very cost effective.
- CIS (Google: Continuous Ink Systems) are available online and are HIGHLY cost effective. These provide a continuous stream of ink to your printer with large ink tank reservoirs. Well worth the upfront cost.

Potential Printer Damage Warning:

Using these systems voids the warranty on many printers. WorldWorksGames accepts no liability for any damages incurred by the use of the aforementioned systems. Use at your own risk.



Automated Cutting Tips

www.worldworksgames.com

Get Help!

Please visit our community forums where you'll find answers to some of the most common machine cutting questions. Troubleshoot, get helpful tips and share your own right here: <http://www.worldworksgames.com/forum/> (Listed under "CraftRobo / Silhouette SD / Automated Cutting Support"). Currently we support CraftRobo & Silhouette SD models and we've included a special file format known as GSD within this product. The GSD opens with a program known as "ROBO Master" which tells the cutter where to cut and score on a given page.

Using GSD's

- First print out your chosen PDF page as normal using your inkjet or color laser printer.

- Once printed, carefully align your printed page onto the craft cutters carrier sheet between the registration marks. The carrier sheet is basically an adhesive, moving, cutting mat which keeps your model bits held down during the cutting process. **It is VERY IMPORTANT that you place the bottom of your printed page into the cutter first (the page legend should be to the rear of the carrier sheet as shown). If you place this upside down on your carrier sheet (page legend nearest the opening of the cutter) the cutter will cut in the wrong area or it will not read your registration marks at all.**

- Now load your carrier sheet into the cutter. See your cutters manual for instructions on loading media into the cutter.
- Open the ROBO Master software.
- Load the corresponding GSD file from your model sets GSD folder.
- Click on the CraftRobo cut button.
- Adjust your media settings and blade cap to one of the following depending on your paper weight:



110lb Cardstock
Speed: 10
Thickness: 28



Cover 100lb
Speed: 10
Thickness: 33



Index 90lb
Speed: 10
Thickness: 25



Matte Photo Paper
Speed: 10
Thickness: 25



Cover 60lb
Speed: 10
Thickness: 24



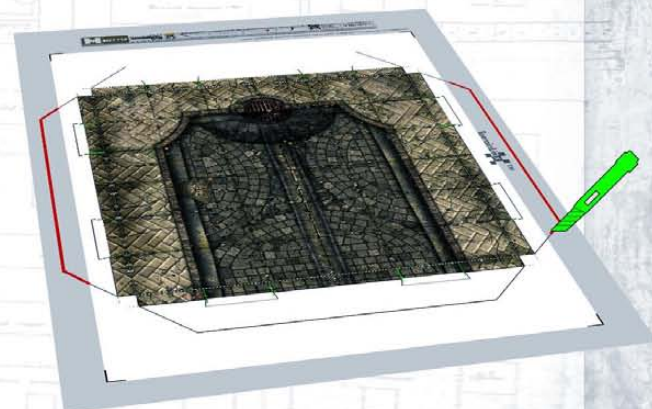
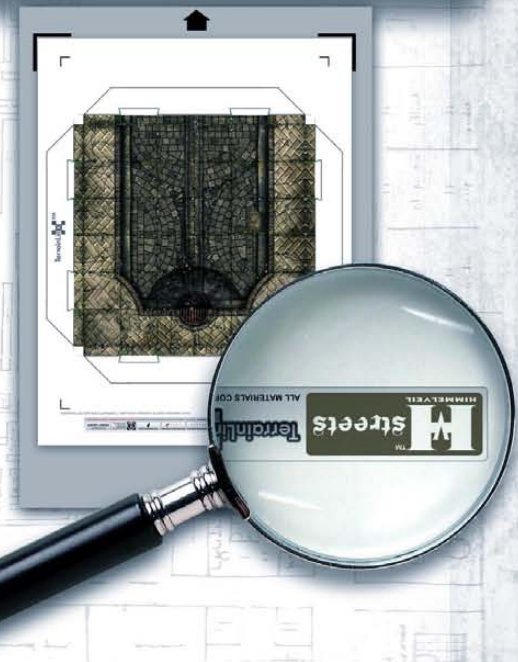
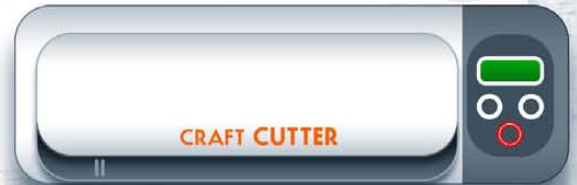
Cover 80lb
Speed: 10
Thickness: 28

- Once your media thickness has been set, select the "cut" button on the lower right of the interface.
- Your craft cutter will now cut the template out for you, freeing you up to focus on other issues. Once cut, unload the carrier sheet (see manual) and remove your freshly cut and scored items for construction.

Incomplete Cuts

You may find, depending on your media type and or blade life, that occasionally your craft cutter does not complete all cuts 100%. In these situations its always good to have a hobby knife around to complete very small leftover cuts. In most cases it's a simple issue of aggressively "punching out" templates from the page. You can run your template through the cutter for a second pass but your results will vary depending on what is being cut and or how much tack is left on your carrier sheet.

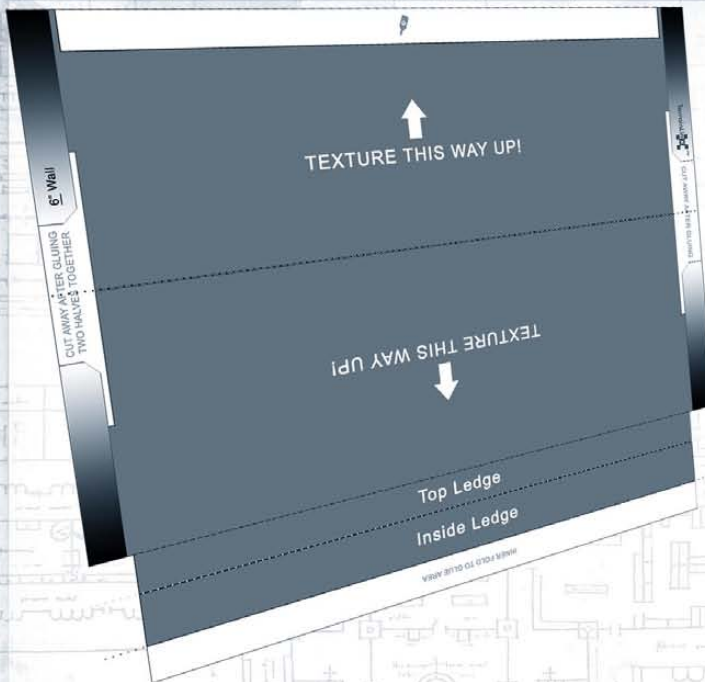
While all of our templates are machine cuttable, occasionally when a model element is too large or exceeds the "safe cutting area", very minor hand cuts are required. Our "big floor" tile for example has two flaps which extend out of this range very slightly. Use a pair of scissors or a hobby knife to complete these short cuts.





Wall Construction

www.worldworksgames.com



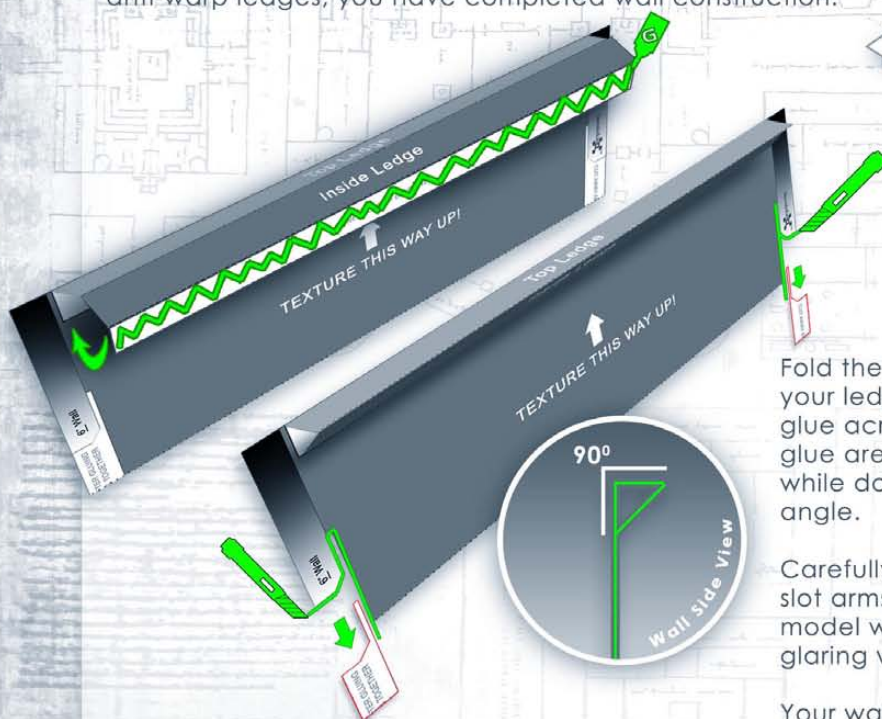
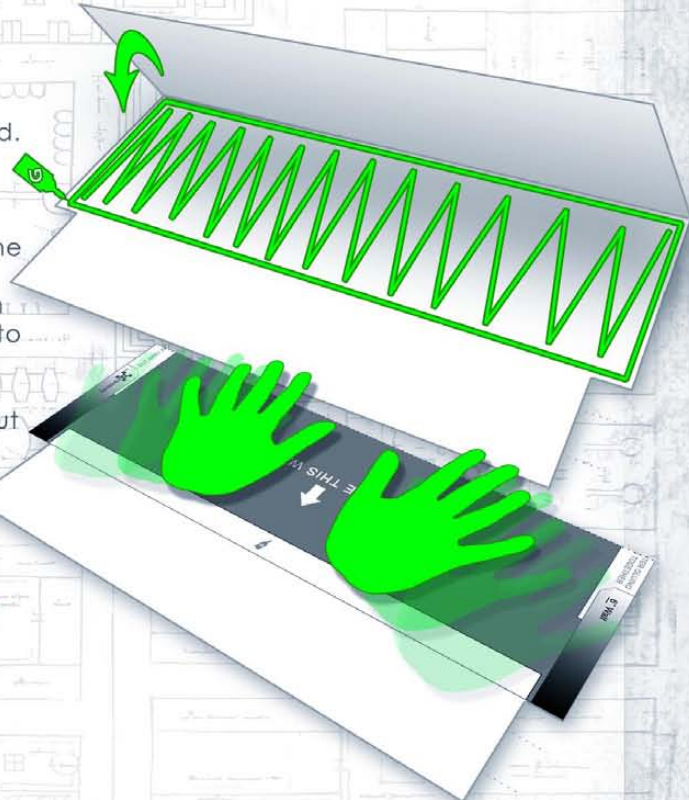
TerrainlinX walls come in two variants; With "anti-warp" ledge and without anti-warp ledge. WorldWorksGames exclusive anti-warp ledge design prevents warping caused by uneven or high water content glues and it also helps support multi-leveled structures. This gives the end user the best flexibility in situations where an anti-warp ledge isn't required or doesn't fit tight layouts.

All TerrainlinX walls (3" & 6" versions) essentially build in the same way and are comprised of:

- An inside and outside textured face
- Slot arms
- Top Ledge
- Inside Ledge
- Ledge glue flap

Start by scoring and cutting your model page where indicated. CraftRobo and Silhouette SD users can load the appropriate GSD cut file to start automated cutting and scoring.

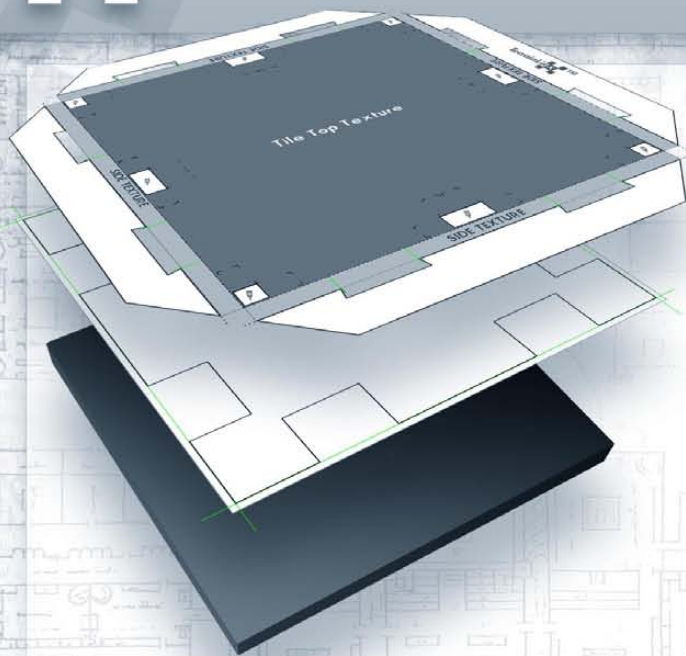
Once the wall is free from its template, fold over the center line to prepare for gluing. Apply a thin but even zigzag pattern of glue to the inside of one wall as shown. Fold over and burnish (rub with hands) the entire length of the wall section. Be sure to apply pressure to all edges and corners to ensure good glue distribution. Flip over and repeat your burnish on the opposite side to prevent warping. If you've chosen to build walls without anti-warp ledges, you have completed wall construction.



Fold the top three anti-warp ledge flaps over and test your ledge for fit before gluing. Apply a thin zigzag of glue across the glue flap and fold it inside to meet the glue area. Apply pressure along the edge of the ledge while doing your best to maintain a good 90 degree angle.

Carefully cut away the remaining whitespace below the slot arms. Once complete take a minute to edge your model with an appropriate colored marker to hide any glaring white edges.

Your wall section is now complete!



TerrainlinX floor & ground tiles employ a number of features which help them to create stable, sprawling, multi-levelled layouts which are supportive of walls and other elements "on-the-fly". When linked together, these become powerful layout tools.

All TerrainlinX floor sections build in a similar way (3"X3", 3"X6", 6"X6") and are comprised of:

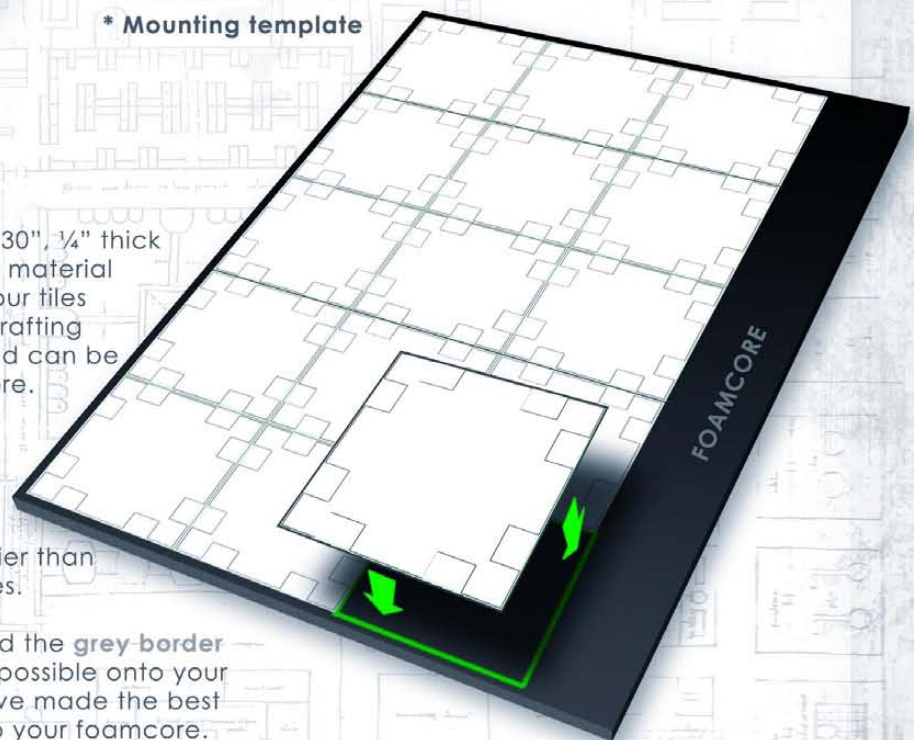
- Top tile texture (with anchor markers)
- Side cover textures (with linX tab concealment flaps)
- Underside glue flaps
- Post holder anchors
- * Mounting template

Mounting your tiles

The first thing you'll need is a sheet of 20" X 30", 1/4" thick foamcore (3/16" thick will work as well). This material provides a solid structural base and gives your tiles excellent longevity. This is a very common crafting material which is reasonably inexpensive and can be found at your local craft or office supply store. It is also available online.

We also recommend full sized, 8-1/2" X 11" "peel & stick" label paper to print your mounting templates. This makes the job of adhering templates to foamcore **MUCH** easier than the mess and fuss of spray adhesives or glues.

Cut out the floor mounting templates around the **grey border** and dry-fit as many mounting templates as possible onto your foamcore. Once you are satisfied that you've made the best use of space, glue or peel and stick them to your foamcore.

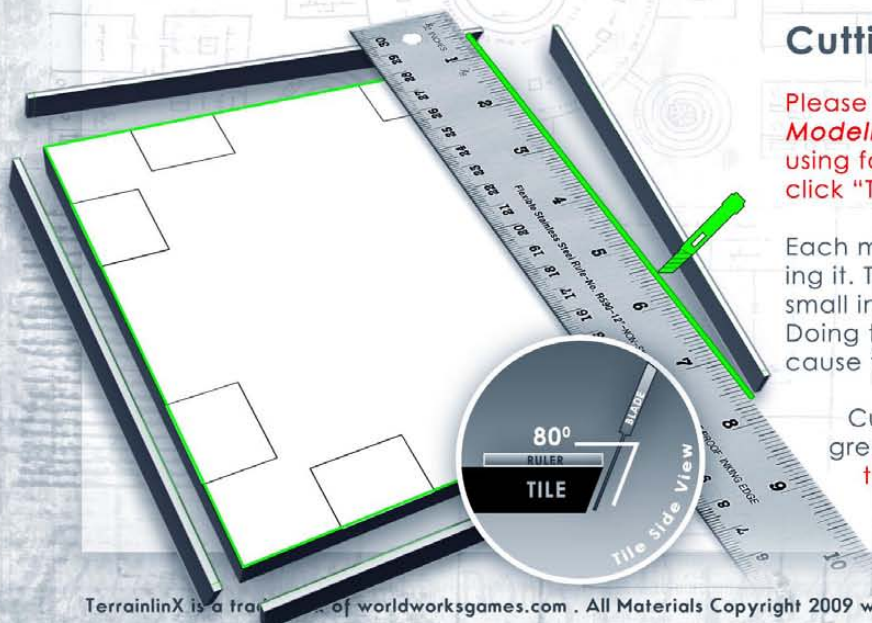


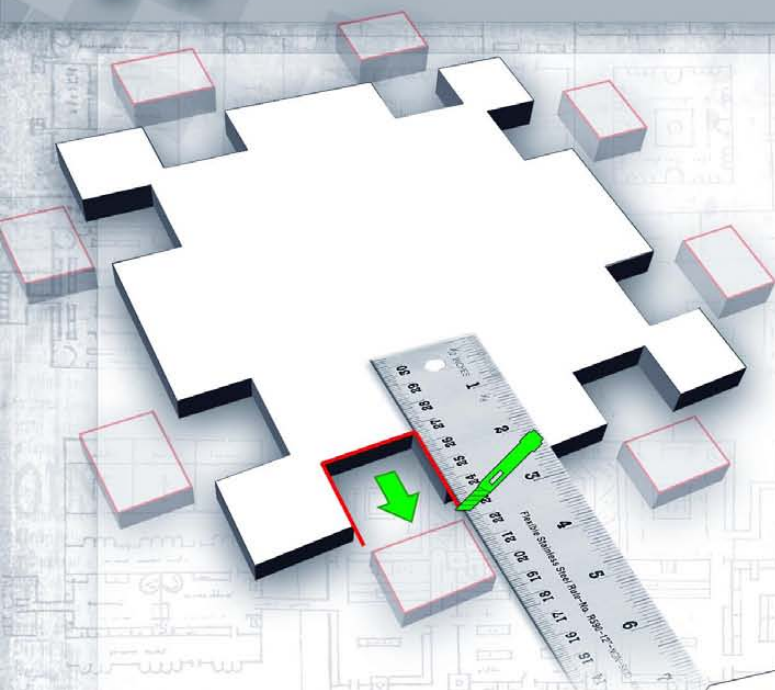
Cutting Your Tiles

Please consult our **Free Beginners Guide to Cardstock Modeling** for proper mounting and cutting techniques using foamcore. Visit www.worldworksgames.com and click "Tutorials".

Each mounting template has a green cutline surrounding it. This inner line helps us cut each of our tiles at a small inward sweeping angle (roughly 80 degrees). Doing this prevents any cutting irregularities which may cause fit issues with neighboring tiles.

Cut away excess foamcore extending beyond this green border. (When cutting foamcore **ALWAYS** use the **"3 cut rule"**! Please consult Beginners Guide).



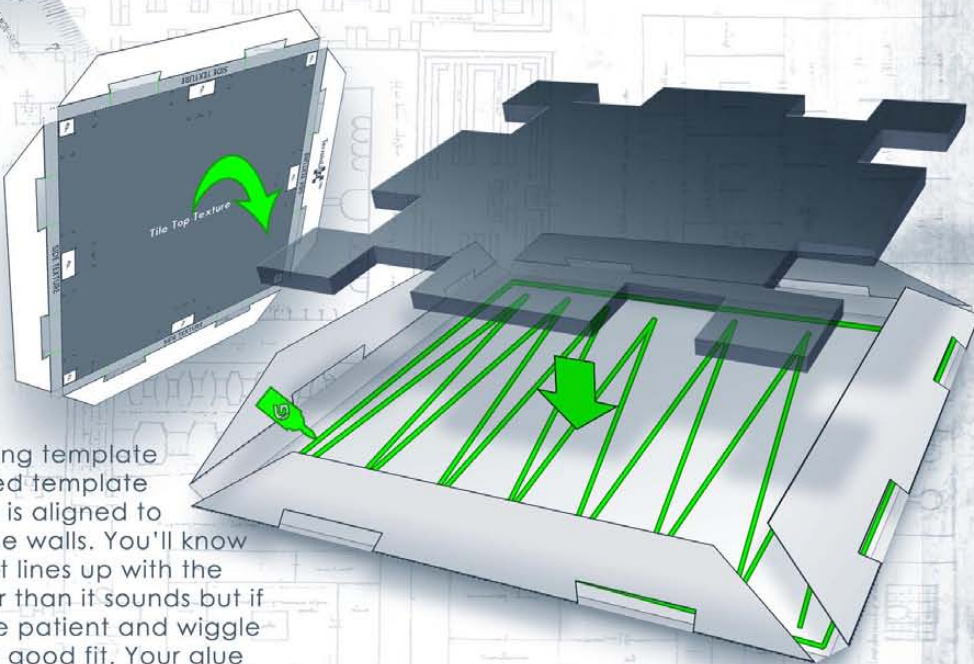


Continue by cutting away the inner slots as shown. In this case however, when holding your blade, be sure to use a straight up and down position when cutting. This will give your LinX connector tabs a good solid connection when we slide them into place while connecting adjoining tiles.



You can now take your original tile and flip it over (texture facing down), bend up the side walls and glue flaps as shown. Be sure they are well creased. These side walls will act as a guide for us to precisely lay in our mounted template.

If you've done a good job of folding the tile template, this next step should be self resolving. Apply glue to the backside of the tile within the central square (or to the bottom of the mounting template if you choose). Now lower your mounted template into place, making sure that each side is aligned to the lower crease of the surrounding side walls. You'll know if you have good alignment if each slot lines up with the sidewall flap and opening. This is easier than it sounds but if you do have problems remember to be patient and wiggle your template around until you have a good fit. Your glue should give you a bit of time to move things around.



Once your template is in place you can now fold over the remaining four glue flaps and glue in place. These flaps keep our LinX connector tabs in place and support multi-tile layouts when being lifted.

Your tile is now ready for use as-is if you are using a type which has no anchors and or no wall capabilities. If your tile does use anchors, posts and walls, we can now proceed to the next step...





Anchor Construction & Mounting

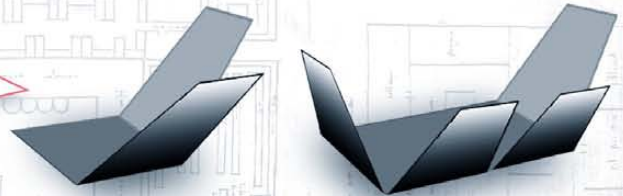
www.worldworksgames.com

Anchors keep our wall posts in place but rest flat on the tile when not in use. There are two types of anchor which we'll need to mount to our 6" tile. The corner anchor which consists of two anchor arms and the center anchor which uses four anchor arms. 3" tiles only make use of the corner anchors.

Score where noted and fold over your anchor template. Apply an even bead of glue and burnish the two halves together. Once dry, cut down the central green cutlines to free the 4 individual anchors. On the "center anchor" version you'll be doing much the same job but you'll end up with 2 individual anchors (4 arms each).

Corner Anchor (2 arms)

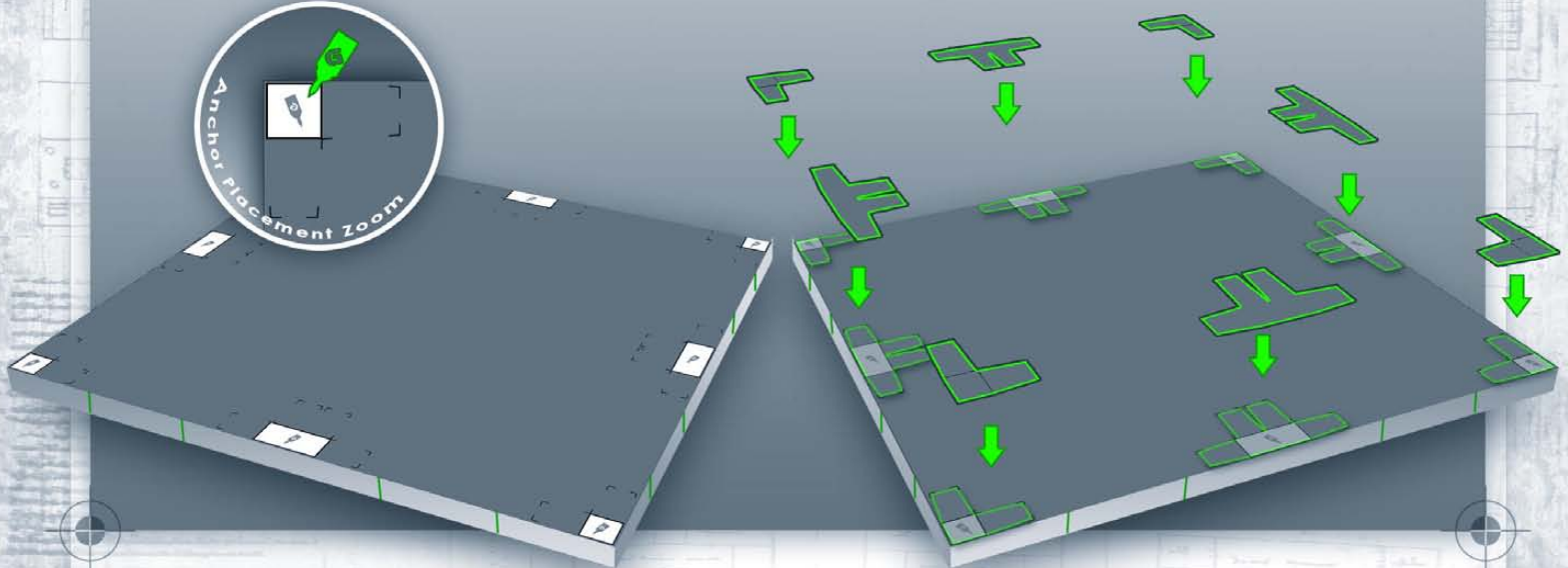
Center Anchor (4 arms)

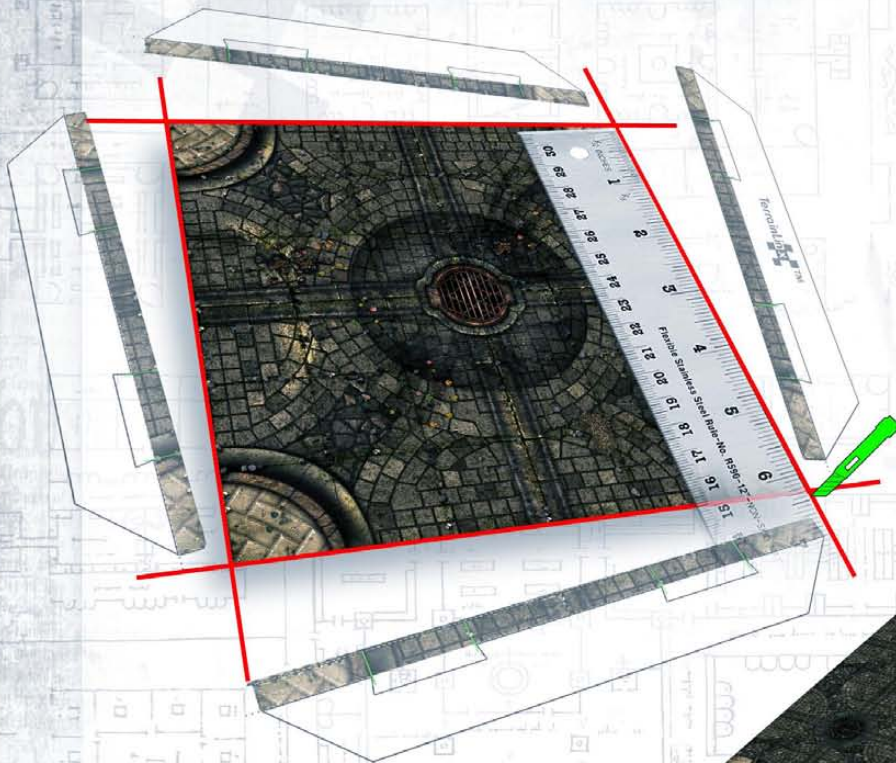


Mounting Your Anchors

When mounting our anchors it's important to apply glue only in the areas indicated. You need each anchor arm to swing freely upward and downward so that they can secure posts as needed.

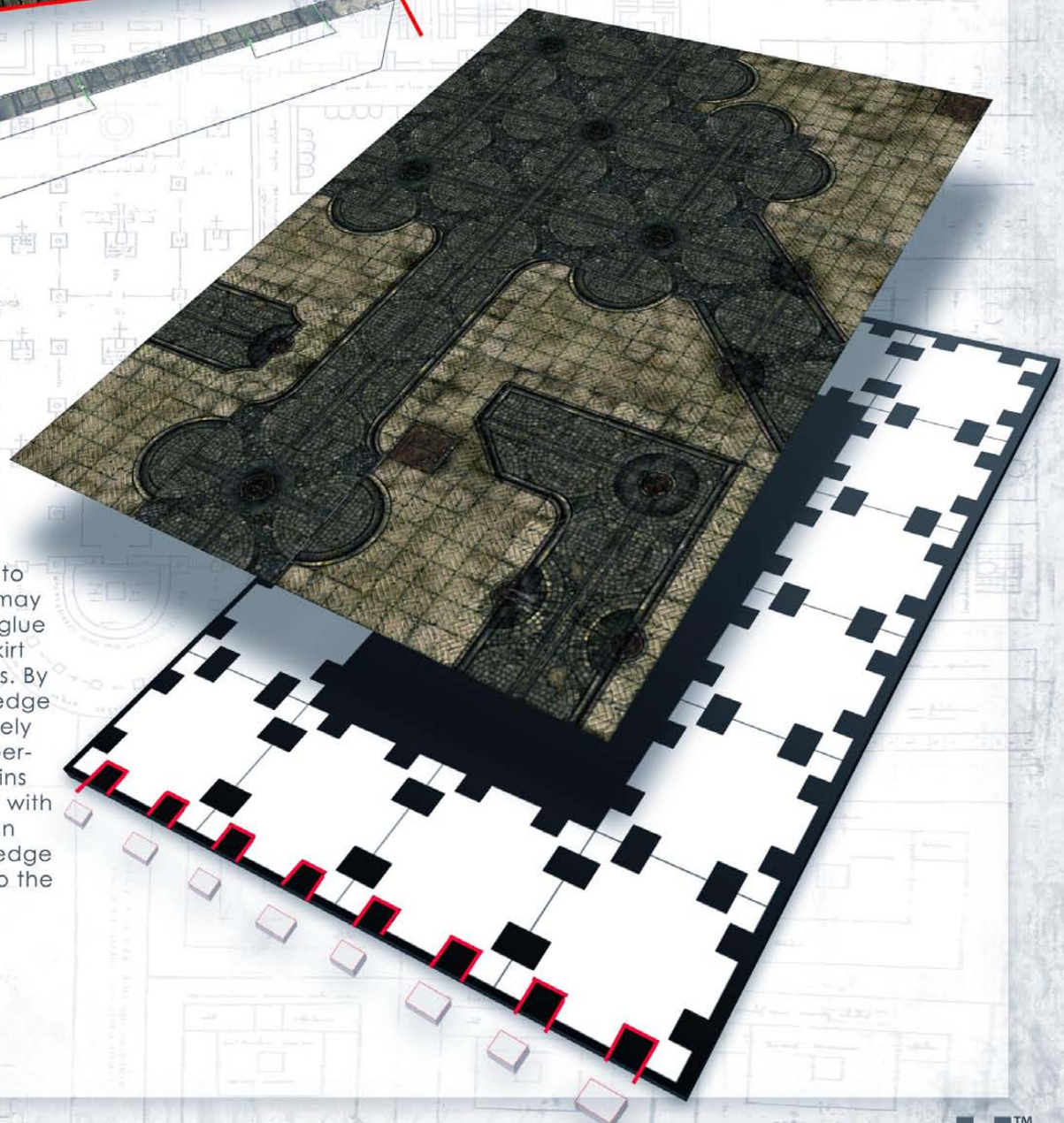
Each anchor placement guide shows you where to apply glue but it also shows you roughly where the anchor arms should rest when laying flat. This is to help you precisely align each anchor during attachment to the tile. This alignment is important due to the exact tolerances used to make the system work. If your mounting is too far off, your posts may not be secured properly.





Though we don't generally recommend doing things this way, as it limits modularity, Speedmounting can help you get a layout on the table more quickly. If you want to fill out an existing layout, use the tiles without their inherent modularity or you prefer to create larger spans of layout (preconfigured city blocks or dungeon runs), Speedmounting might be the thing for you.

To start, simply cut away the edge flaps from your tiles as shown. You can use your ruler placed on the score lines as a guide. Save the flaps though because we can use them later to treat the edge of our board.

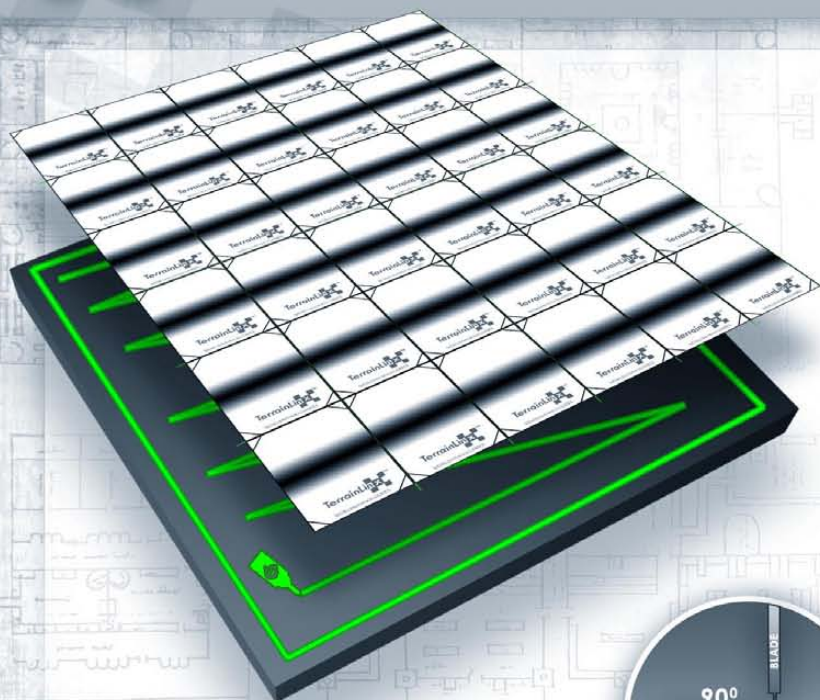


When it comes time to mount your tiles, you may choose to optionally glue down a surrounding skirt of mounting templates. By cutting out all of the edge slots, you can effectively create one large "super-tile" which still maintains some linking capacity with adjoining tiles. You can now bring back your edge flaps and glue them to the side and rear of your supertile.



LinX Connectors Construction

www.worldworksgames.com

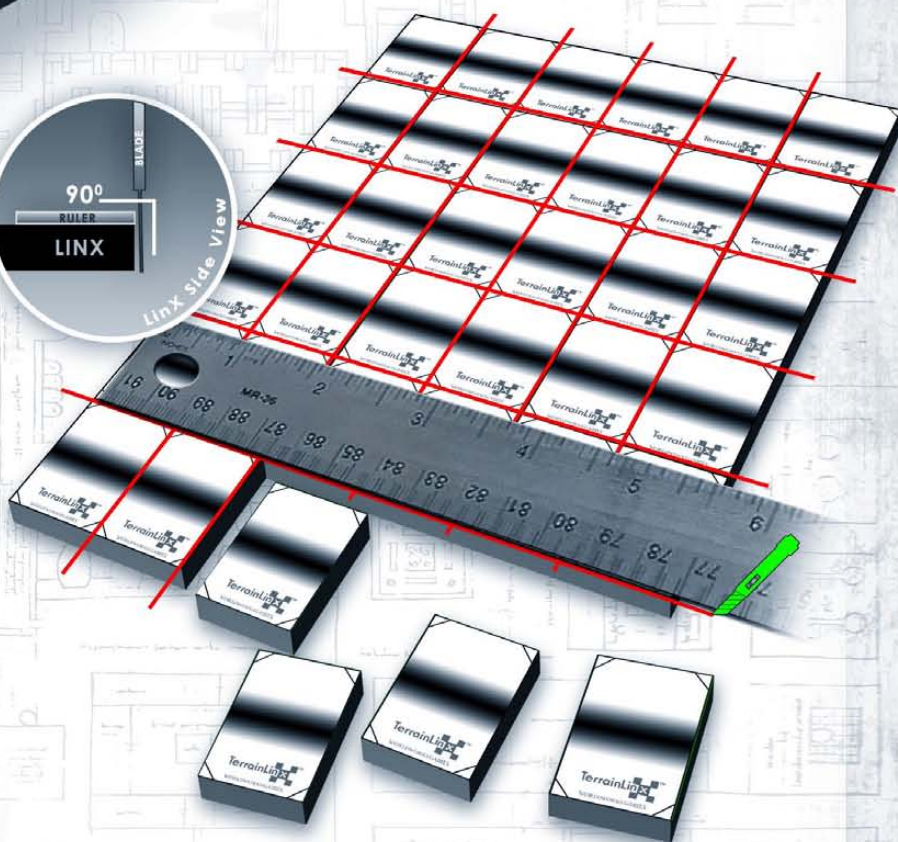


LinX connectors help secure your ground/floor tiles into larger layouts. Depending on your requirements you'll need to fabricate a number of them in bulk. It's a good idea to make at least three full sheets of connectors as a start to your collection.

Start by mounting your connector sheet to foamcore (just as you did with the mounting templates).

After a short drying time you can cut free your connectors. When cutting out your LinX connectors it's important that you keep your blade straight up and down at close to a 90 degree angle. This will ensure that each individual connector slides cleanly into tile slots while still maintaining a solid grip. You can cut out a sheet of mounted connectors very quickly.

(Always follow the "3 Cut" rule when cutting foamcore. Please see our free "Beginners Guide to Cardstock Modeling" for more information.
www.worldworksgames.com "Tutorials")



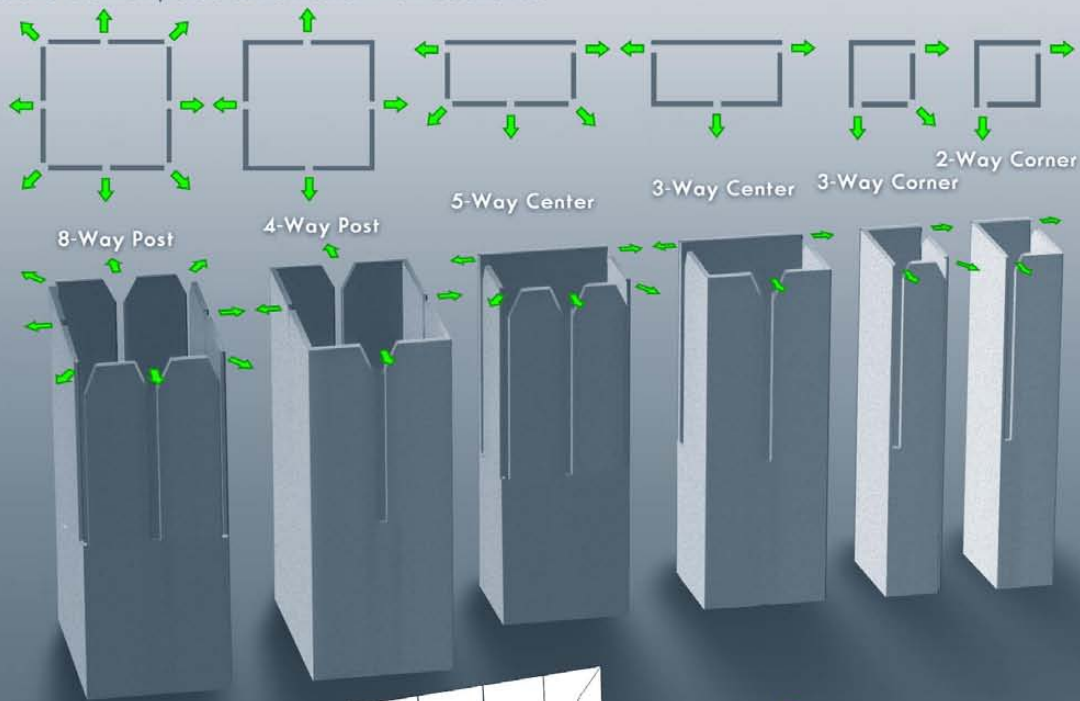
Once each LinX connector is cut free, cut away each corner. You can freehand these cuts as they don't need to be terribly precise. These corner cuts help LinX connectors enter tile slots smoothly.

Once complete you can use a plastic kitchen sandwich bag to store your connectors.





There are 6 unique posts utilized in the TerrainlinX system. Depending on your layout requirements, each has a specific usage. 8-Way & 4-Way posts are typically used within the interior of larger layouts with many connected tiles and offer all possible wall angles. 5-Way & 3-Way center are used on outer structural walls and give internal layouts additional flexibility. 3-Way corner & 2-Way corner are used as absolute corner posts on exterior wall sections.



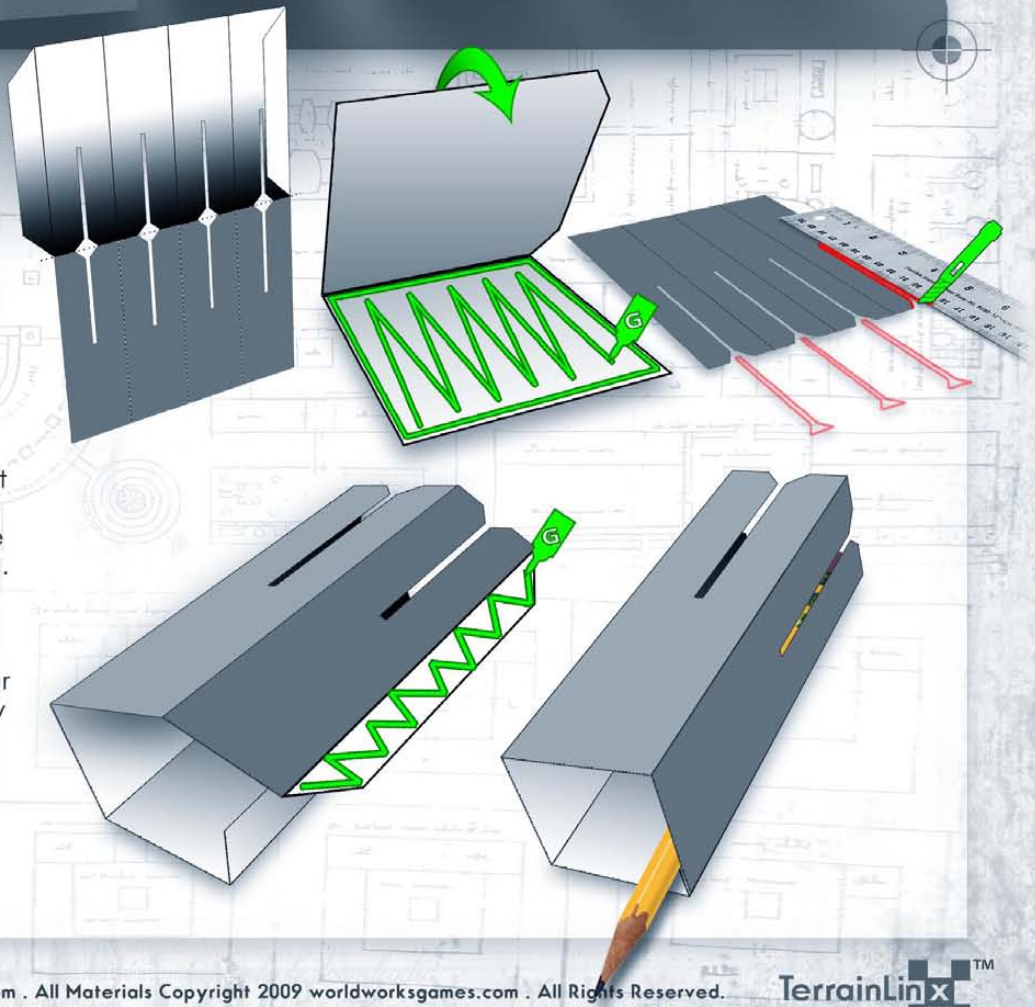
Building Your Posts

In the following example we are constructing a 4-Way post but each of the above TerrainlinX post designs build in essentially the same way.

Start by cutting out your template and scoring where noted. Fold over and glue the template so that you have a texture on one side and a gradient on the other. Once dry cut away the white slot spaces.

Apply a bead of glue to the outside glue flap. Fold it over to meet the inside glue area. Use your blade or a thin implement to apply even pressure to the glue flap while drying. In tight spots (corner post) an unwound paperclip will do the trick.

All done!





Plug-In Railings & Balcony Construction

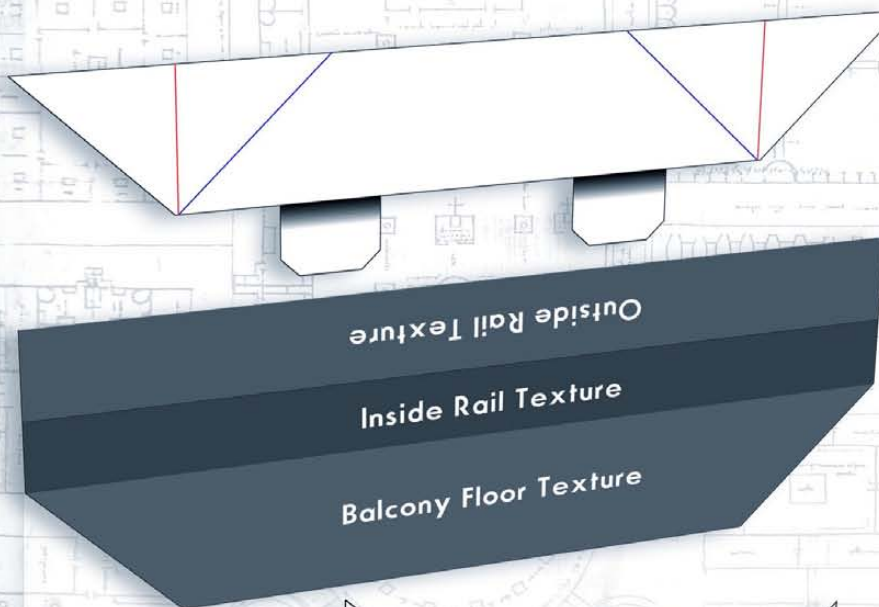
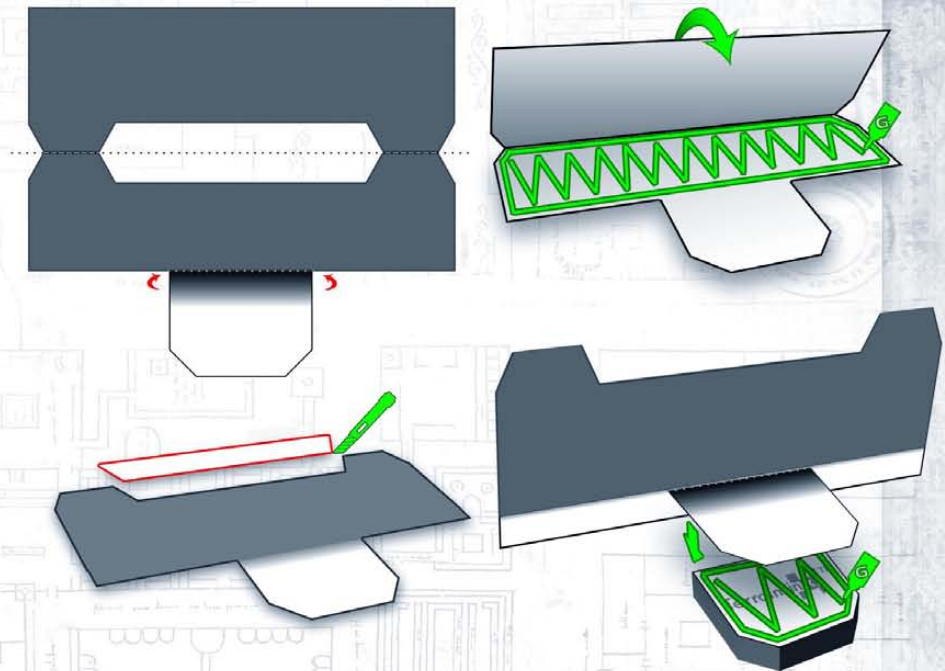
www.worldworksgames.com

Plug-in Railings

Plug-in railings come in 3" and 6" versions. These railings slot directly into the sides of standard tiles for terraced or elevated layouts.

Start by folding over and gluing the railing. Burnish and allow a short dry time. Cut free any white space shown along the top of the railing design if present. Mount the half LinX tab connector to foamcore or use the "offcuts" from our earlier mounting tiles for this purpose.

Apply glue to the top of the connector. Now apply glue along the inside white overhang of the railing where the connector meets the back of the rail. Lower into place and burnish until dry.



Balconies

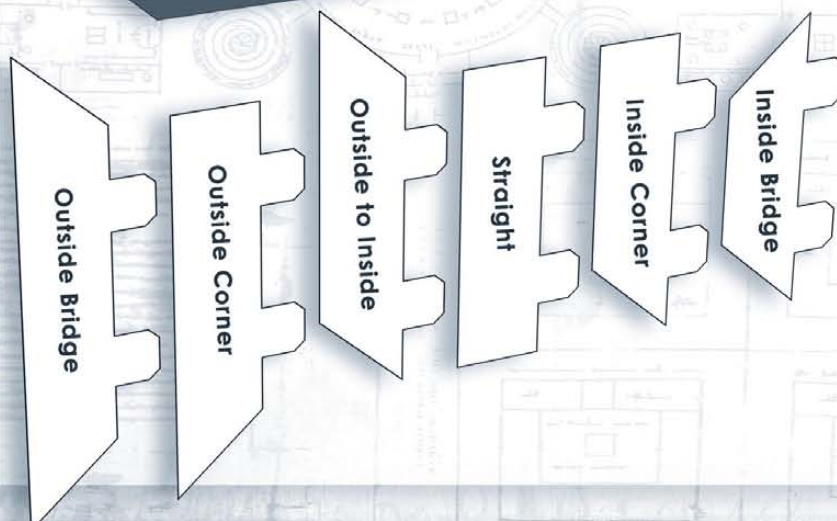
Balconies also slot into the sides of existing tiles but these offer both railing and a narrow balcony floor in a single design. Used for small building balconies or skirting the insides of walls. Balconies come in 3" and 6" designs but function in exactly the same way.

The balcony system is comprised of a mounting template and a texture overlay. Rather than creating a million templates, the balcony mounting template is a one-size-fits-all solution that allows you to determine what kind of shape or sweep you need for your design.

The core balcony shapes used in the TerrainlinX system are:

- Outside bridge
- Outside corner
- Outside to inside bridge
- Straight bridge
- Inside Corner
- Inside Bridge

Using these six variants, you can create almost any balcony design.

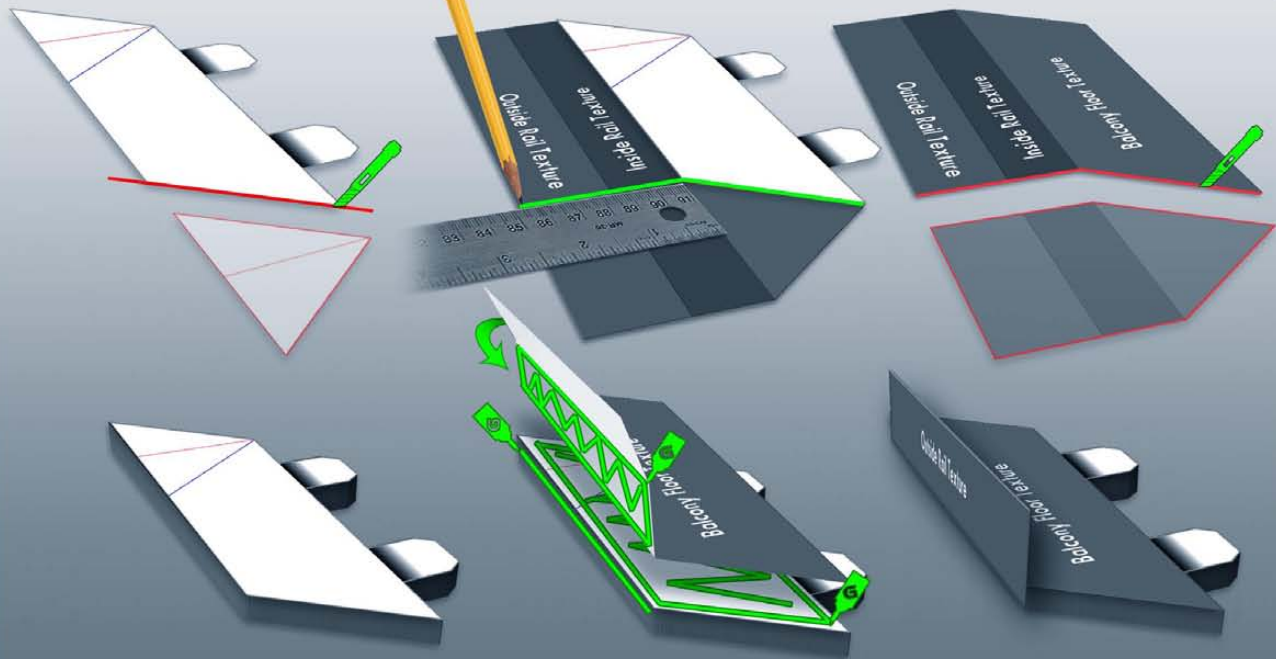




Plug-In Balcony Construction

www.worldworksgames.com

In the below example we are constructing an "outside to inside bridge". Cut away the appropriate side of the template to match your core balcony shape. Red and blue lines are present on the template to help you do that job. Place your template on top of the "balcony floor texture" surface. Using a pencil, trace the templates footprint. When you come to the "inside and outside rail texture" draw a straight line from where the floor angle terminates. Cut away the excess texture. Mount your template to foamcore. Glue the texture overlay to the template as shown.



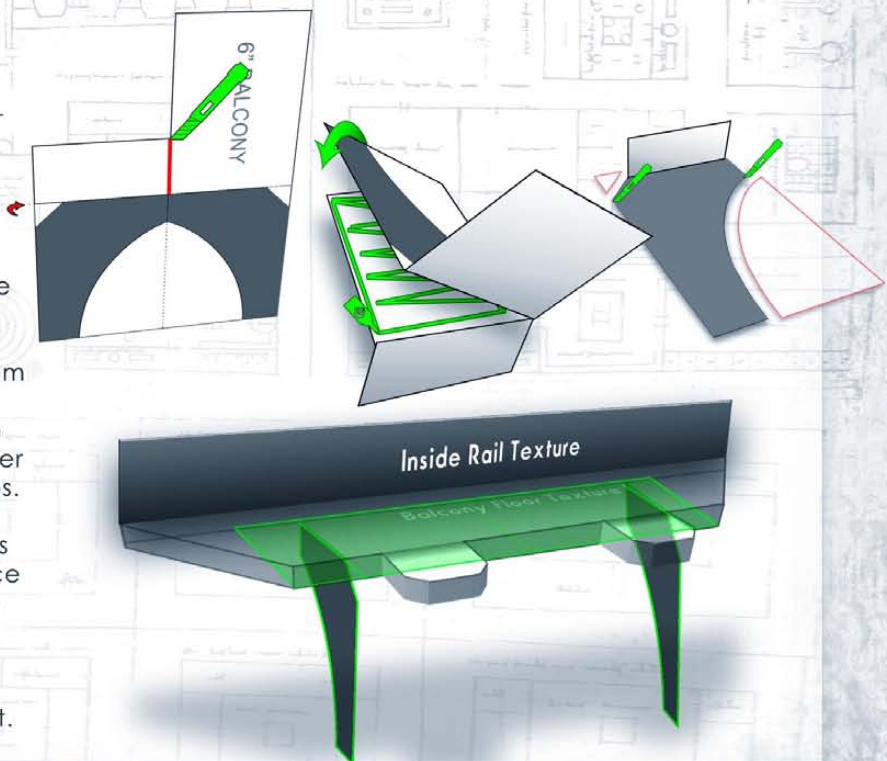
Balcony Supports

To further support balconies (and heavy miniatures) you need to add balcony supports. These come in both 3" and 6" variants.

Fold over and glue the balcony support making sure NOT to glue the two top glue flaps together. Once dry, cut away the inside curve and top corner white space.

You can now glue your supports to the bottom of the balcony. The long glue tab points to the inside of the balcony, while the short tab points to the outside. Your top notched corner should be facing the balcony connector tabs.

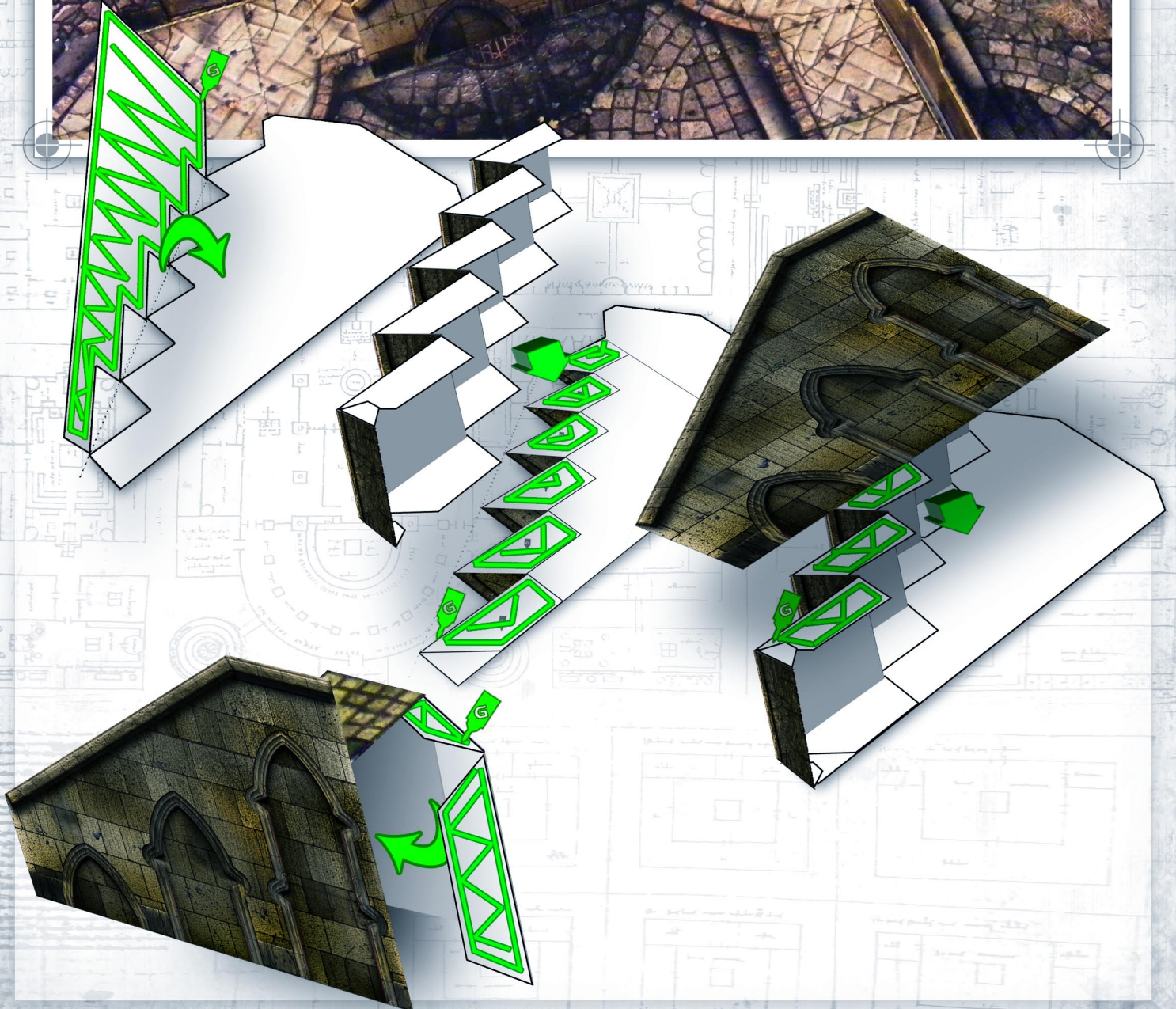
We've predefined support placement but it's not an exact science. You may need to place your supports in other areas and or use more or less of them on a given balcony shape. If going for custom placement be sure to use the 3" version of the supports as these have shorter glue tabs for more flexible placement.





Stairs Construction

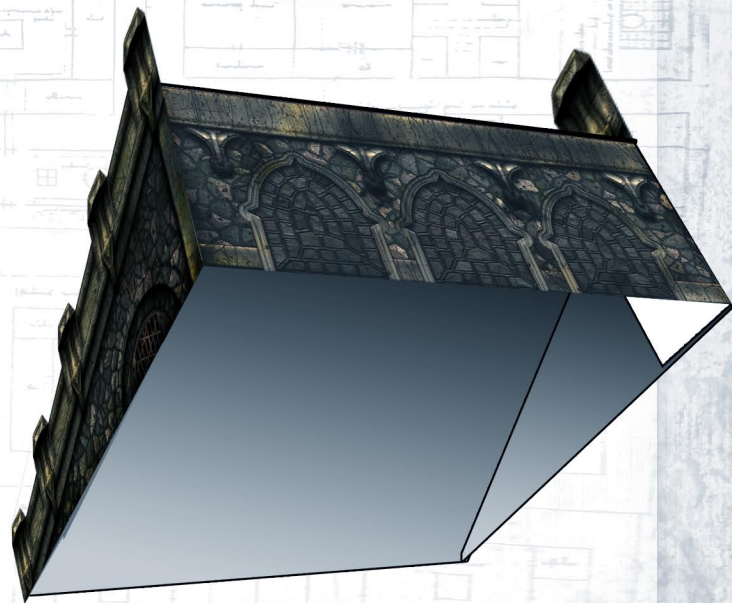
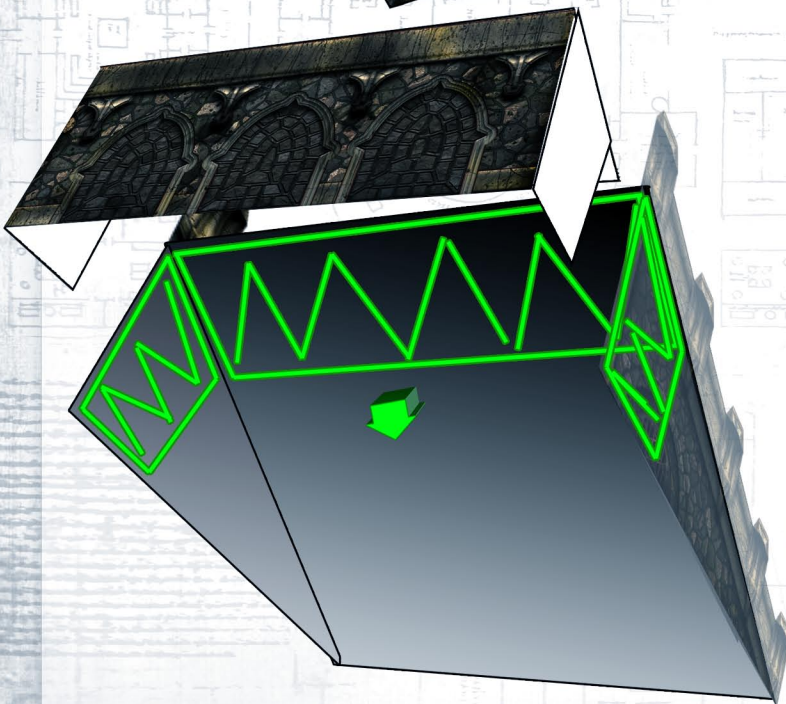
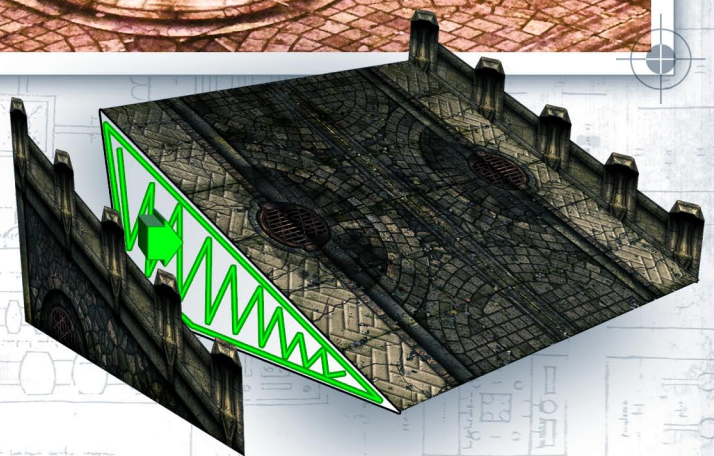
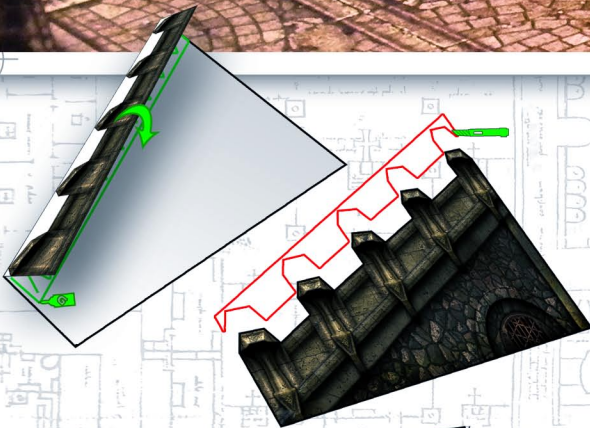
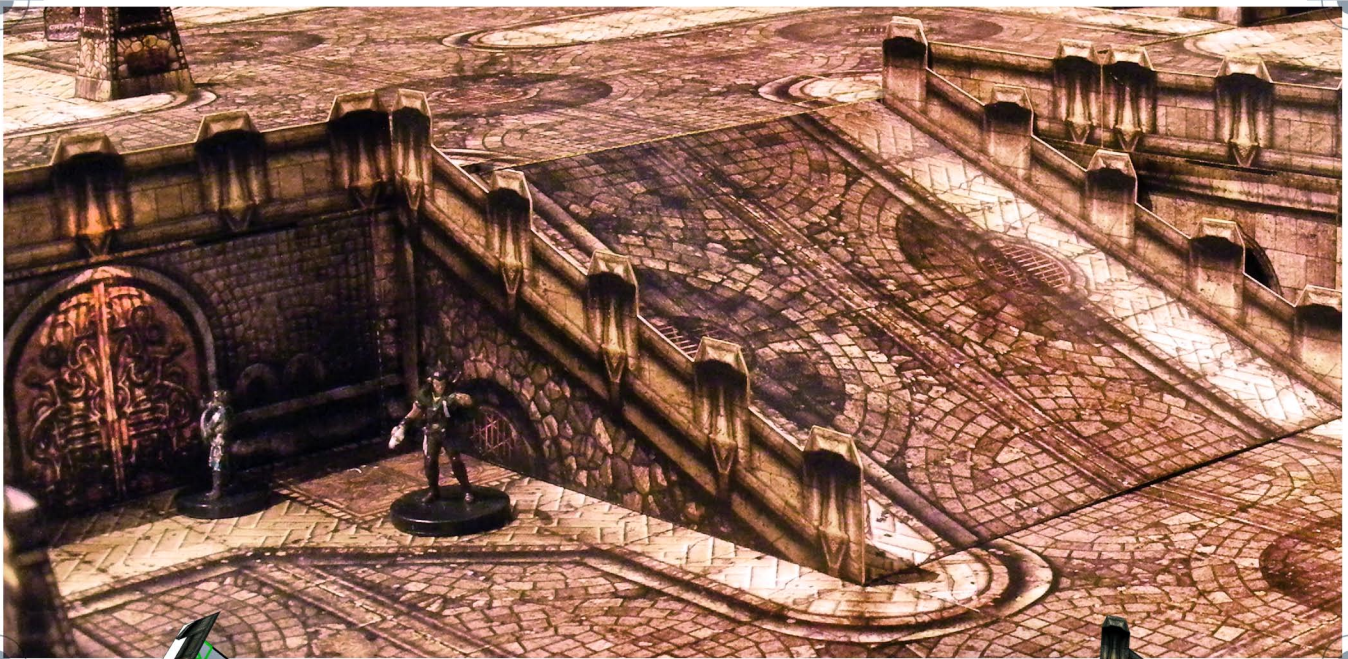
www.worldworksgames.com





Ramp Construction

www.worldworksgames.com

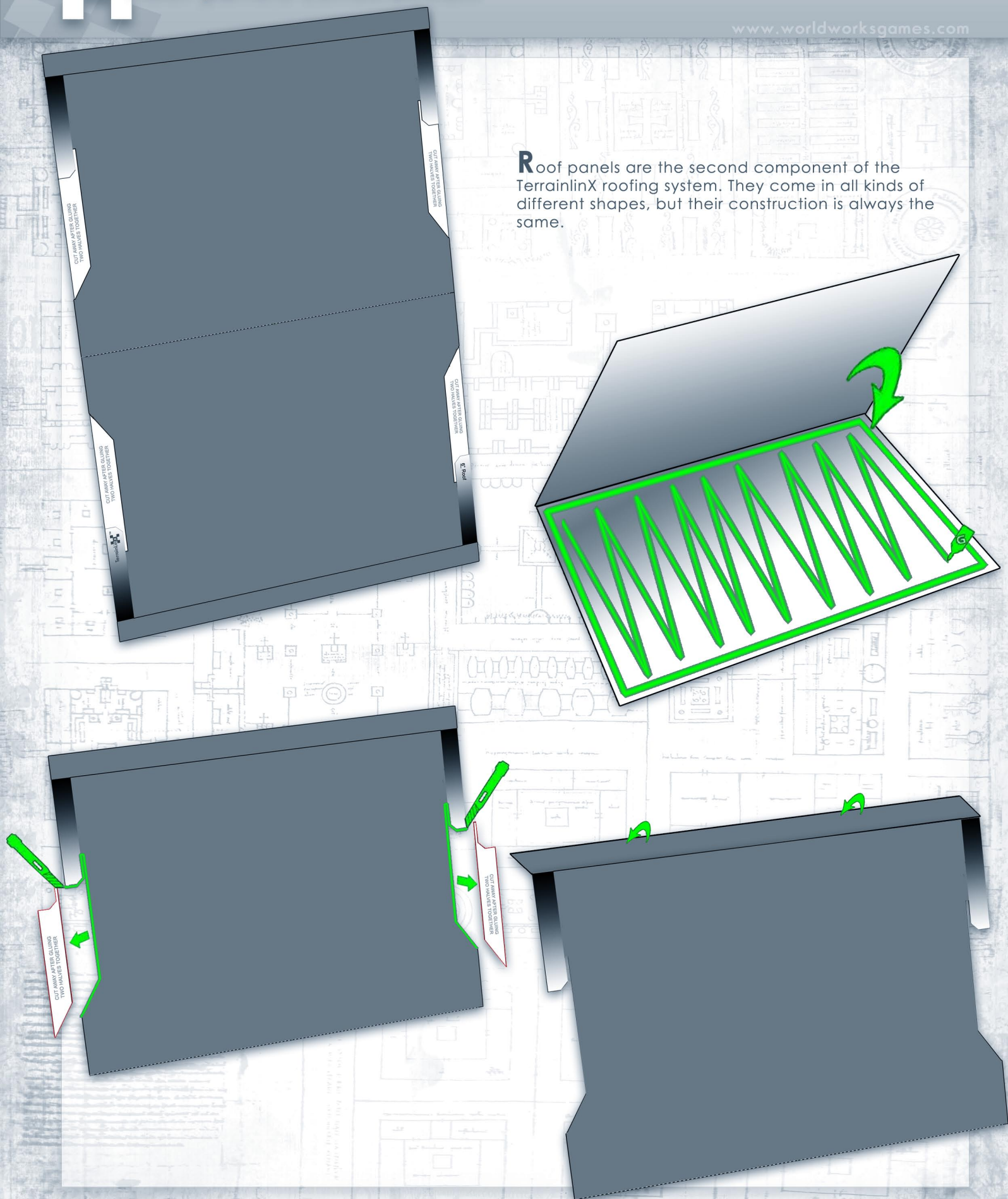




Roof panels construction

www.worldworksgames.com

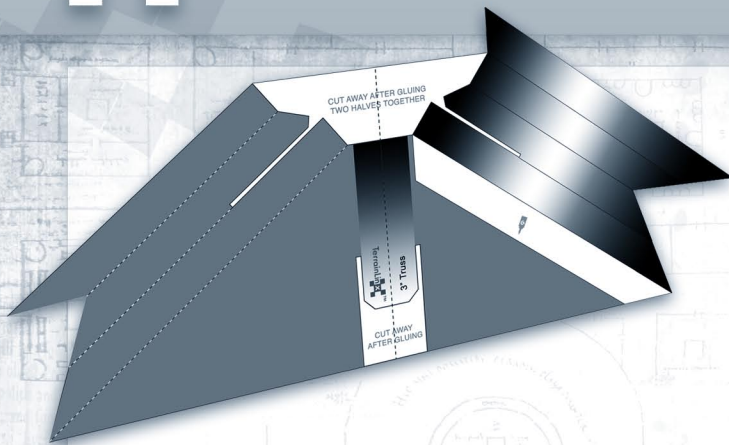
Roof panels are the second component of the TerrainlinX roofing system. They come in all kinds of different shapes, but their construction is always the same.





Trusses Construction

www.worldworksgames.com

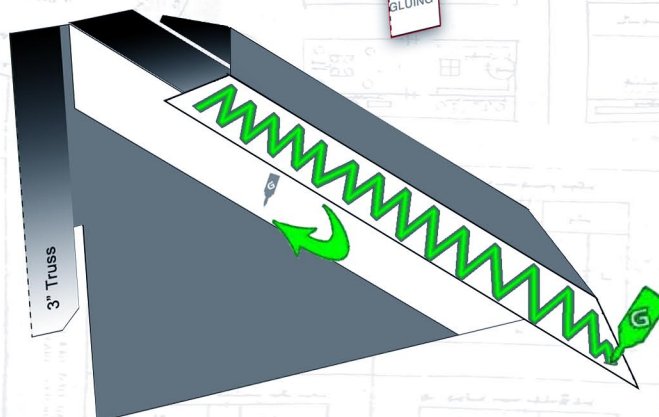
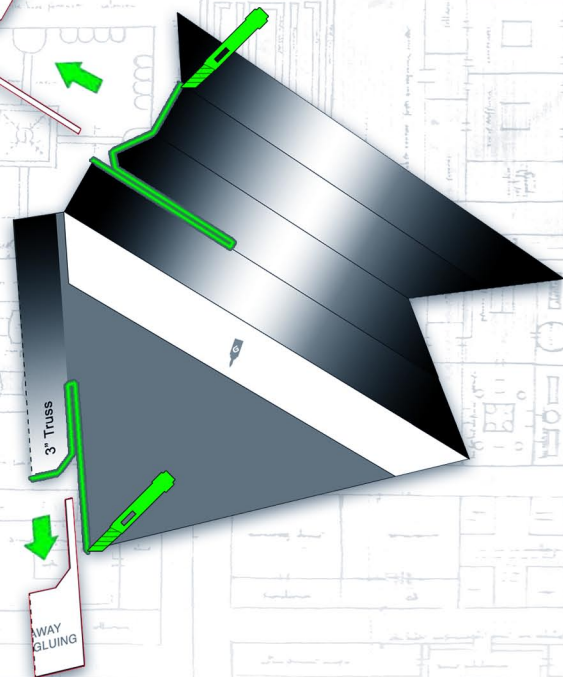
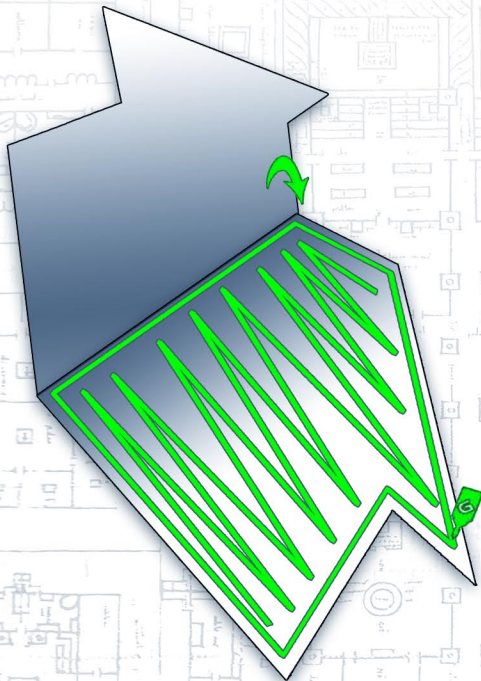


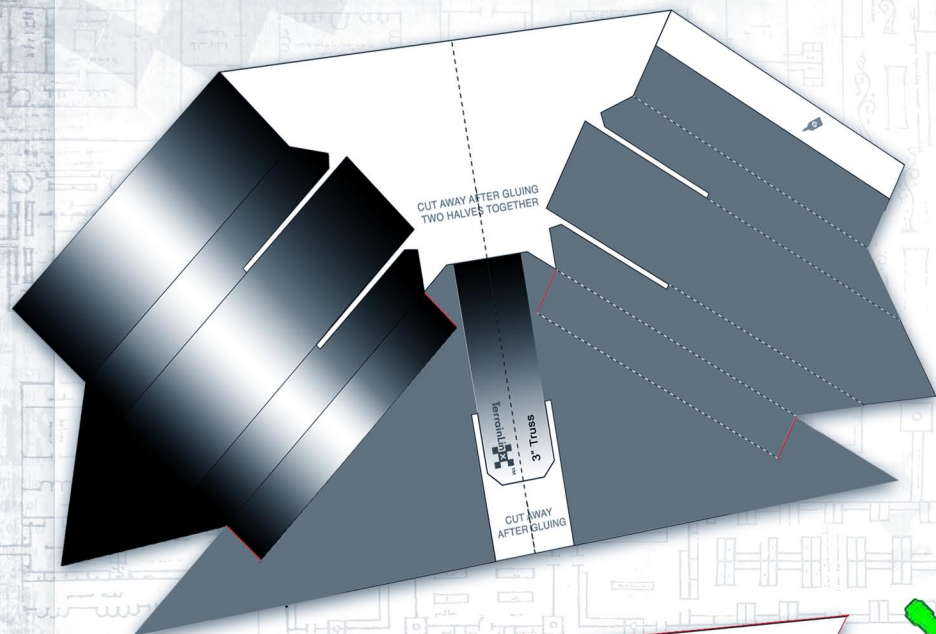
The TerrainlinX roofing system is built with two core component types: trusses and roof panels.

Trusses come in 3 different variants: end trusses which you put at the end of a tile, 1-way trusses that you can put in the middle of a tile and 2-way trusses, that are used to make longer roofs.

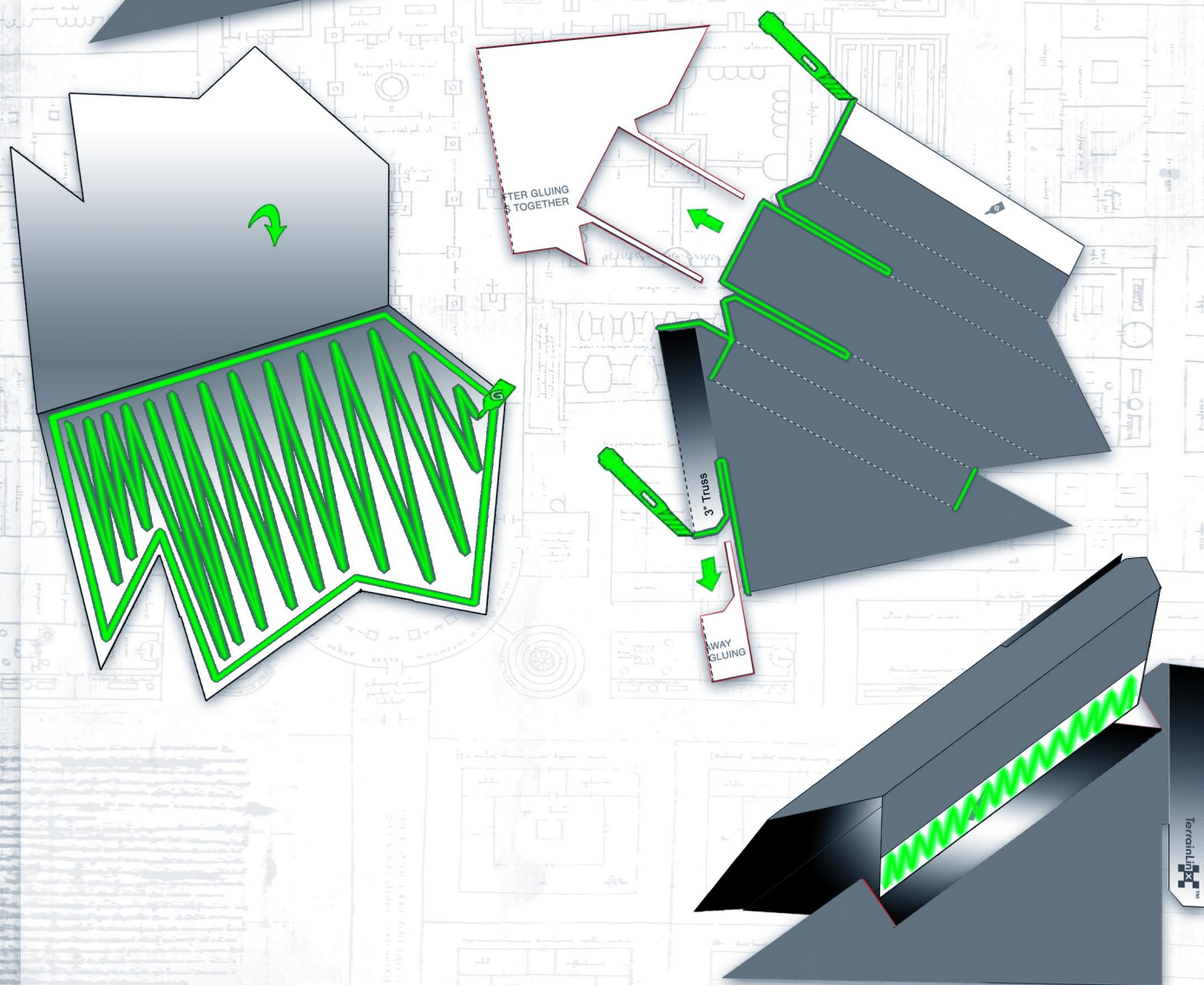
All end trusses and 1-way trusses have the same base components:

- Inside tile texture (with glue area)
- Outside tile texture
- Top of the truss
- Inside of the truss
- Underside of the truss
- * Glue flap of the truss



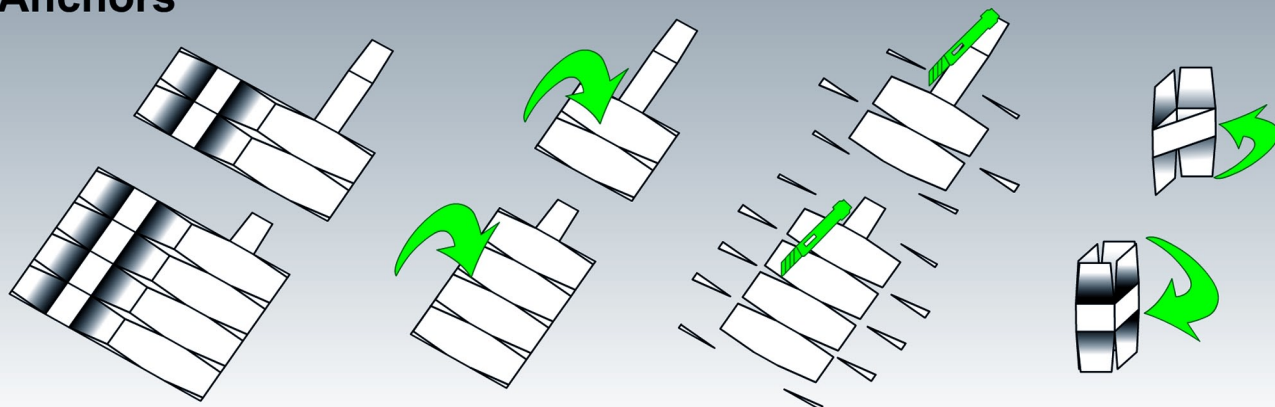


Two-way trusses are constructed the same way as the end trusses. The only difference is in the way the truss itself is glued shut.

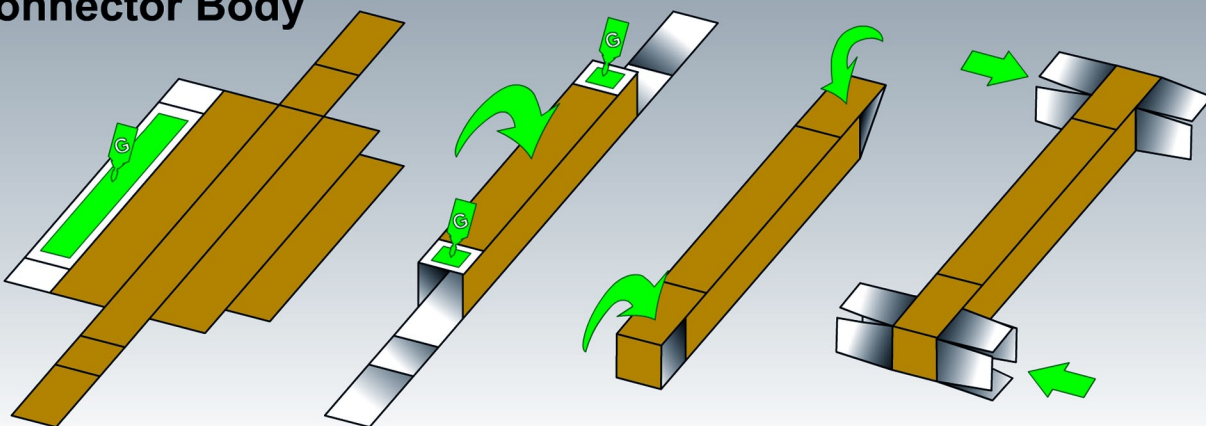




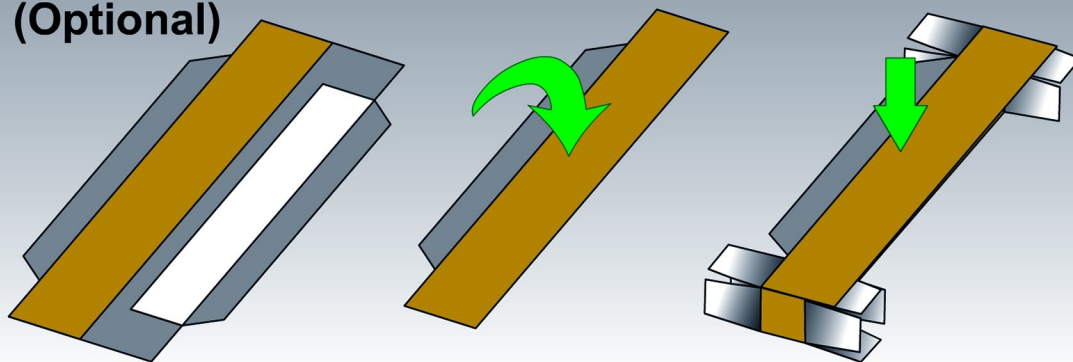
Anchors



Connector Body



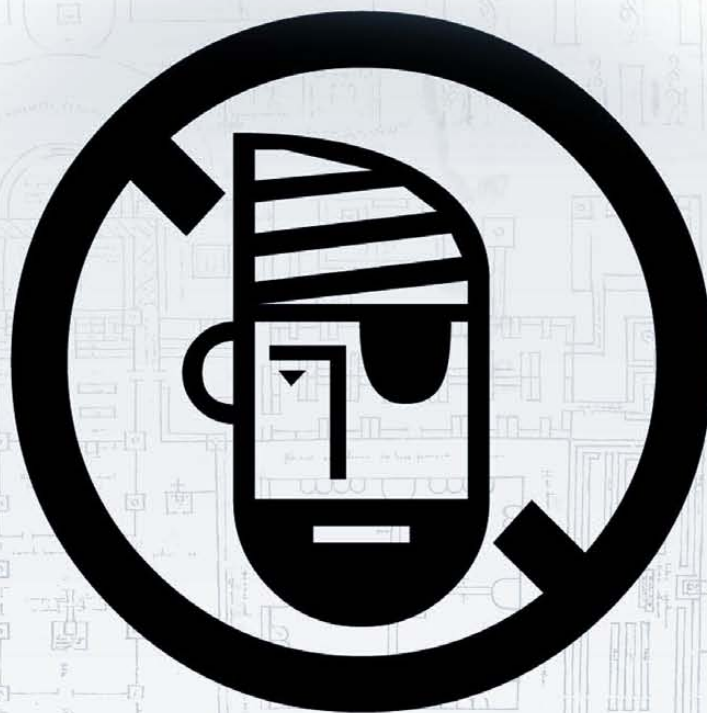
Railing (Optional)





Support & Spread the Word

www.worldworksgames.com



If you enjoy and use our work please consider supporting us.

We can't continue to do what we do without your support. It's just that simple. We are a small business with consistently responsible pricing and renowned customer & community support. We care about our customers and we won't make you pay any more than you have to for our products.

So long as we can continue to put food on the table for our families, we'll keep doing what we love to do here at WorldWorksGames.

Thank you for your support and if you can't support us please do your best to spread the word!

"BRINGING MAGIC BACK TO THE GAMING TABLE"

WORLDWORKSGAMES™



Join us on-line at the official
WorldWorksGames store!

Since 2002 gamers worldwide have been experiencing the WorldWorksGames difference! Join our thriving community of terrain enthusiasts in the community forums or get directly involved with terrain designers on upcoming projects! Our business is terrain and our mission is to make your tabletop dreams come true!

Our terrain line spans fantasy, modern, sci-fi, horror, pirate and so much more! We also produce a wide range of games, adventures, standees and creative game aids to enhance your gaming sessions. Visit www.worldworksgames.com and expand your experience with flash movies, user created kitbashes, free video and PDF tutorials, unparalleled 24/7 customer support via our massive community knowledgebase and e-mail support services.

We listen, we deliver, we care!

www.worldworksgames.com

