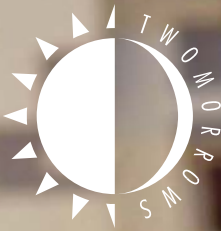


The Magazine for LEGO® Enthusiasts of All Ages!



\$8.95
in the US

Brick Journal

Issue 25 • September 2013

people • building • community

The Castle Issue

Builder
Spotlight:
Bob Carney

Features
Instructions
AND MORE!

French
Castle Building

EXCLUSIVE: A Minifigure rollercoaster? You can
build it with the Rollercoaster Factory!



The Alamance County Arts Council
presents

Nathan Sawaya

The
Art
of
the
Brick®

AUGUST SEPTEMBER OCTOBER, 2013

One of CNN's top 10
'Global Must See Exhibitions'



The Captain White House
213 S. Main Street
Graham NC, 27253
336 226 4495



This exhibit is offered free and is open to the public
through generous community gifts

artsalamance.com

Hours: Mon - Sat, 9-5 pm | Sun, 1-5 pm

Yellow by artist Nathan Sawaya



Contents

From the Editor.....	2
News/Features	
LEGO Coasters? Maybe	4
Making Tracks	11
There's a Map for That!	14
You Can Build It:	
London Underground Sign.....	16
The X-Wing® Lands in New York.....	20
The Hobbit:	
An Unexpected Review	25
Minifigure Customization 101:	
Photographing Your Customs.....	30
Take Lighting to the Next Level!.....	33

People/Building

Building Castles	35
Building Castles: A Timeline.....	40
Building the Perfect Castle:	
Windows and Arrow Slits.....	43
Community	
Phrean: A Medieval City.....	50
Ras-al-Jabar.....	56
Building Archenal.....	61
BrickNerd's Do it Yourself:	
Trojan Rabbit	68

You Can Build It:	
Micro Guarded Inn.....	72
Community Ads.....	78
Last Word.....	79
AFOLs.....	80

September 2013

Issue 25

Publisher

John Morrow

Editor in Chief

Joe Meno

Photography Editor

Geoff Gray

Proofreader

John Morrow

European and LEGO Group Bureau Editor

Megan Rothrock

Japanese Bureau Editor

Nathan Bryan

West Coast Editors

Todd Kubo

Ashley Glennon

Contributors:

Jared Burks, Bob Carney, Jeffrey Cheung, Stéphane Daly, Christopher Deck, Ashley Edwards, Anton Fedin, Geoff Gray, Michael "Xero" Marzill, Nicolas Picot, Jack Rimer, Paal Smith-Meyer, Duncan Titmarsh, Adam Reed Tucker, Tommy Williamson, Daniel Z, and Greg Hyland.

Many thanks to the websites who have served as mirrors for BrickJournal:

www.LUGNET.com, www.Brickshelf.com, www.peeron.com, www.brickmodder.net, www.rustyclank.com

About the Cover:

A closeup of a layout from Fana'Briques 2012, built by MBFR, the German LEGO Model Builders of the Rheinland.

Photo by Joe Meno.

Corner: Preliminary design for Rollercoaster Factory cars.

Art provided by CoasterDynamix.

About the Contents:

A wider shot of the layout by MBFR.

Photo by Joe Meno.



From the Editor:

Greetings! It's another issue of *BrickJournal*, and this time, it's focusing on castle building.

There's a bit of everything here, from some news about the life-size X-Wing that is now at LEGOLand California to a look at some castle displays in the US and Europe.

You might have noticed that there are more graphics in the last couple of issues. This is something that I have been working on in the past

few months. I have always wanted to show building techniques, and have done breakaway photos. However, making digital models and then showing breakdowns has been an idea I wanted to try for a couple of years. The only thing that held me back was my inexperience with digital building tools.

That changed this year. I did some work and reading and studying and now can build and then diagram models. Hopefully, I will be able to do more, but what are your thoughts? Are the diagrams helpful? I want to know.

Thanks!

Joe Meno, Editor

P.S. Have ideas or comments? Drop me a line at admin@brickjournal.com. I'm open to suggestions and comments and will do my best to reply.

P.P.S... Yes, *BrickJournal* has a website—www.brickjournal.com! Twitter? Yep, there too—<http://twitter.com/brickjournal>. Facebook? Yup—<http://www.facebook.com/group.php?gid=58728699914&ref=mf>. Or you can scan the bottom codes with a QR reader!

P.P.P.S. If you want info on a subscription, you can go to: http://twomorrrows.com/index.php?main_page=product_info&cPath=78&products_id=616 or scan below!

Website



Twitter



Facebook



Subscriptions



Glossary

AFOL (Adult Fan of LEGO)

NLSO (Non-LEGO Significant Other)

MOC (My Own Creation)

TLG (The LEGO Group)

BURP (Big Ugly Rock Piece)

LURP (Little Ugly Rock Piece)

POOP (Pieces—that can be or should be made—Of Other Pieces)

SNOT (Studs Not on Top)

LUG (LEGO Users Group)

LTC (LEGO Train Club)

LEGO®, TECHNIC, MINDSTORMS, Beville, Scala, BIONICLE, ExoForce, Mars Mission, World City, and other LEGO theme lines are trademarks of the LEGO Group of companies. All articles, photos, and art are copyright BrickJournal Media, LLC 2011, TwoMorrrows Publishing and the respective writers, photographers, and artists. All rights reserved. All trademarked items are the property of their respective owners and licensees. Subscriptions are \$57USD Media Mail, \$75 Canada, \$86 International Surface, \$128 International Airmail and can be purchased at www.twomorrrows.com or payment sent to: TwoMorrrows Publishing, 10407 Bedfordtown Drive, Raleigh, NC 27614 USA. The editorial/advertising office address for BrickJournal is: BrickJournal Editor, 5610 Briar Oak Lane #510, Raleigh, NC 27612 USA or admin@brickjournal.com. First Printing. Printed in the USA. ISSN 1941-2347.

BrickJournal and its staff would like to thank the LDraw community for the software it makes available to the community, which we use for making all of the instructions and renderings in this magazine. We would especially like to thank Kevin Clague for his continued upgrades of the LPub tool that is a part of the LDraw suite. For more information, please visit <http://www.ldraw.org>.



GET THE ORIGINAL **DIGITAL-ONLY** ISSUES OF **BRICKJOURNAL**

BRICKJOURNAL COMPENDIUM 2

Before becoming a print magazine, there were nine **DIGITAL-ONLY** issues of BrickJournal produced from 2005-2007, which are still available as **DIGITAL EDITIONS** for only **\$3.95** each!

And while supplies last, the original 4th and 5th issues are available in print form in **BRICKJOURNAL COMPENDIUM 2**, a full-color trade paperback with a wealth of information and building tips on all things **LEGO®**! (**NOTE:** These are **DIFFERENT ISSUES** than the current series of print issues you're reading.)

(224-page **FULL-COLOR** trade paperback) ~~\$34.95~~

**SALE: 70% OFF
(ONLY \$10.49)**

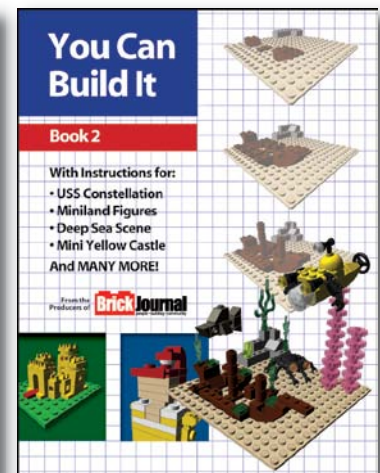
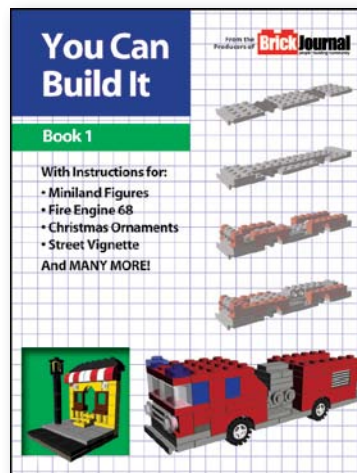
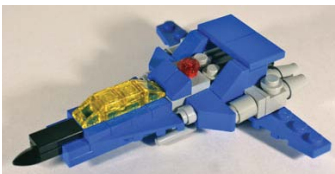


SORRY, BRICKJOURNAL COMPENDIUM 1, 3, AND 4 ARE SOLD OUT!

But all nine of these original digital-only issues are available online as **DIGITAL EDITIONS** for **\$3.95** each at www.twomorrows.com

LEGO fans: You Can Build It!

YOU CAN BUILD IT is a new ongoing series of instruction books on the art of **LEGO®** custom building, from the producers of **BRICKJOURNAL** magazine! Spinning off from BrickJournal's popular "You Can Build It" column, these **FULL-COLOR** books are loaded with nothing but **STEP-BY-STEP INSTRUCTIONS** by some of the top custom builders in the **LEGO** fan community. **BOOK ONE** is for beginning-to-intermediate builders, with instructions for custom creations including Miniland figures, a fire engine, a tulip and spacefighter (below), plus miniscale models from "a galaxy far, far away," and more! **BOOK TWO** is for intermediate-to-advanced builders, with even more detailed projects to tackle, including advanced Miniland figures, a miniscale yellow castle, a deep sea scene, a mini **USS Constitution**, and more! So if you're ready to go beyond the standard **LEGO** sets available in stores and move into custom building with the bricks you already own, this ongoing series will quickly take you from novice to expert builder, teaching you key building techniques along the way!



(84-page **FULL-COLOR** Trade Paperbacks) **\$9.95** • (Digital Editions) **\$3.95**

**BOTH BOOKS ARE NOW AVAILABLE!
BUNDLE EITHER BOOK WITH THE PARTS FOR
THE TULIP AND SPACEFIGHTER SETS FOR \$20!**



TwoMorrows—A New Day For LEGO Fandom.



TwoMorrows Publishing • 10407 Bedfordtown Drive • Raleigh, NC 27614 USA • 919-449-0344 • FAX: 919-449-0327
E-mail: store@twomorrowspubs.com • Visit us on the Web at www.twomorrows.com



Paal Smith-Meyer (left) and Adam Reed Tucker show off the Rollercoaster Factory.

LEGO Coasters? Maybe.....

Article by Joe Meno

Photography by Joe Meno

Additional Art and
Photography by Adam Reed
Tucker and X-LABS

As a LEGO® Certified Professional, Adam Reed Tucker has a lot of dreams. One of them was starting the convention for LEGO fans in Chicago, Illinois that became Brickworld. Another was opening a firm devoted to LEGO related projects, named Brickstructures. Still another was developing and launching a LEGO theme, “LEGO Architecture.” It seems fitting that Adam is beginning another dream concept at Brickworld: a LEGO-based rollercoaster. Brickworld 2013 was the place where he veiled his collaboration with CoasterDynamix and LEGO to create the Rollercoaster Factory set. This particular dream, though, was hinted in, of all things, Adam’s company’s logo and some sparring with Paal Smith-Meyer from the LEGO Group.

In talking to both Paal Smith-Meyer (Adam’s LEGO collaborator) and Adam, the idea for a rollercoaster had been present for some time. Smith-Meyer talks about the beginning of the rollercoaster collaboration: “I think actually the rollercoaster idea started for Adam, all the way back to the beginning (of working with the LEGO Group). He had the desire to make a rollercoaster, and he said that it was part of his dream to work with the (LEGO) brick and make rollercoasters come alive.”

Adam chimes in: “When I created Brickstructures in 2007 I wanted to celebrate all the structures, not just tall buildings that I had been known for, so if you notice in my logo, there is an image of a cityscape containing a skyline, and there’s a bridge and there’s a rollercoaster. Being one of the creative forces behind LEGO Architecture with Paal, I was able to fill the first part of the logo, the skyline. Now, I am working on the other two. At Brickworld 2013, I had the privilege of unveiling three years of work on my rollercoaster concepts to fill a void in the LEGO system and hopefully bring a full new dimension to the LEGO brick as a creative medium.”

Looking at the logo, Adam continues: “The last part of the logo is the bridge. All I have to say is stay tuned in 2015.”



Above: Where it all started: the Brickstructures logo.

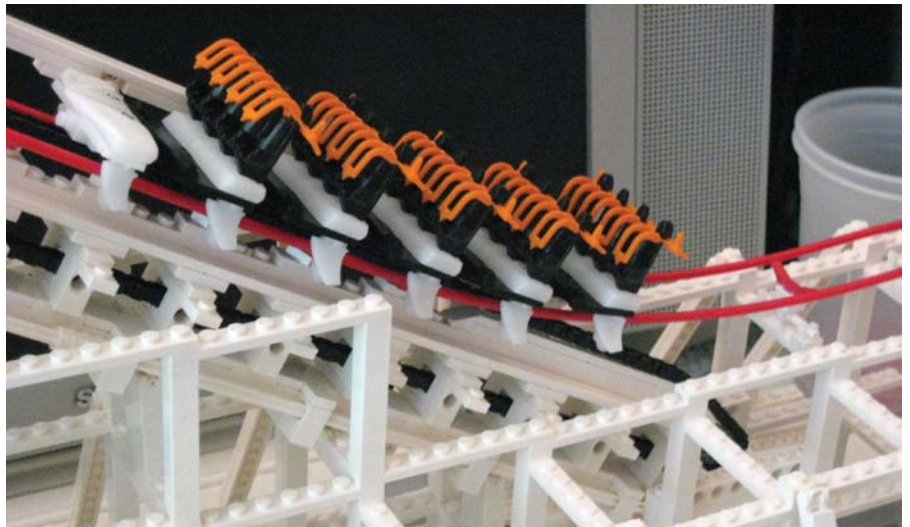
Right: Adam sets up his rollercoaster at Brickworld 2010.

Bottom Right: A closer look at the track, which is modified from a CoasterDynamix set. This was the proof of concept for the track system.



Way back in the beginning, however, Paal was a bit surprised. He mentions, "When Adam made his updated Brickstructures logo, I asked why are you adding a rollercoaster? And bridges? He answered that he wanted to add all the things he wanted to achieve. I remember telling him at the time, 'Adam, maybe you should be focusing on getting LEGO Architecture off the ground, before we start talking about rollercoasters.'"

Adam's reasons for wanting a coaster system are pretty simple. He explains: "There's a few things behind the coaster system. The first is that I am a little bit of a aficionado—I love all coasters like the wooden rollercoasters and I love all the hypercoasters, so aside from being a fan, there is a heck of a lot of engineering and structure and math and science and physics and believe it or not, architecture that goes into designing a rollercoaster, especially themed rollercoasters. It is an area that I'm really big on being original. One of the great things about our LEGO community is that originality seems to be something that people strive for—not really doing things that have been done before, and this rollercoaster project hasn't been done before to the level that I think it ought to deserve the attention it deserves. Based on the fan aspect of it and the engineering and structure aspect of it and the fact that the LEGO Group had never really done or tried to create a set, I went forward. Maybe they had tried or attempted it, but it never made the shelves." Paal concurs,



"We (the LEGO Group) have tried many times ourselves because making coasters with LEGO bricks is something that everyone wants to do. People have tried it with train tracks and they have tried with Technic tubes."

By 2009, Adam was working on LEGO Architecture, but devoted some time thinking about the coaster idea. He made a design breakthrough when he went to the 2009 International Hobby Expo (or iHobby), which was held in Chicago. Adam takes the story from here: "I was at this convention walking around and I saw these two guys pitching a scale model rollercoaster made out of plastic that you had to glue and assemble yourself. To the unskilled patron that would enjoy that type of model, it would have been a disaster to put together. I noticed that

they engineered an HO-scale model coaster and instantly in my head I was able to take their parts and, with knowing LEGO's building system, had a vision for how the two could work together." The two guys Adam met were Jack Rimer and Dan Linden of CoasterDynamix, and from here, the coaster idea began to come together.

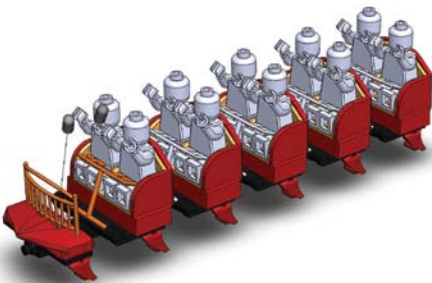
Adam continues, "Snipping away some of the stuff that CoasterDynamix had for their system, I added the LEGO brick 'flavor' to it, I approached Jack and Dan and said, 'Let's hold hands together and do this' because they had the experience and the engineering background to help make this vision possible." As a result, Adam's Brickstructures teamed up with CoasterDynamix to begin work on the Rollercoaster Factory.



Adam's completed rollercoaster.



The logo to X-LABS.



A very early version of the coaster train, before changing them to LEGO compatible wheel sets.

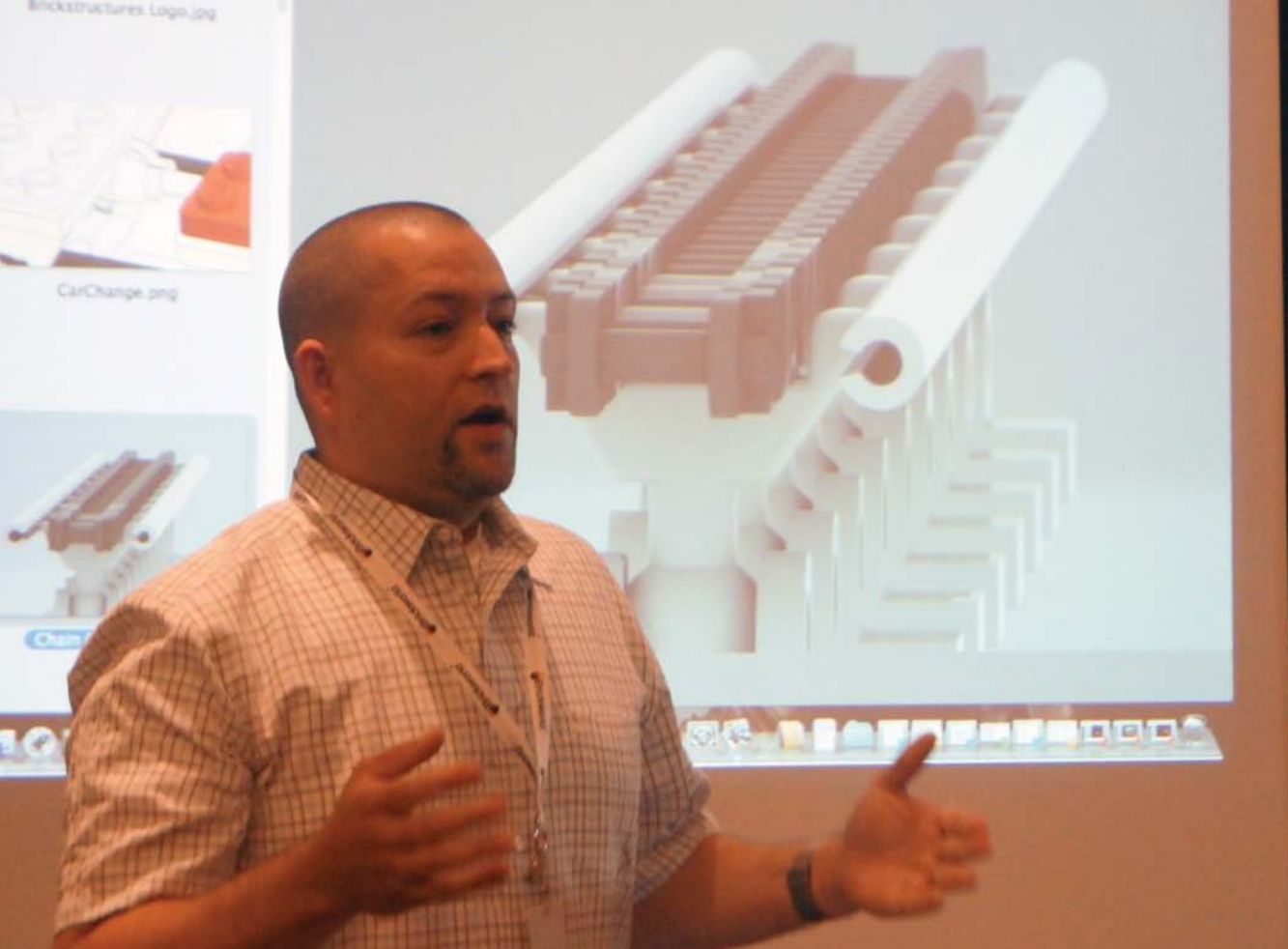
People first noticed something was up at Brickworld 2010, when Adam presented a rollercoaster model for the first time. Made of thousands of parts, the coaster took up a few tables and had a coaster run a complete circuit. This was the first use of the CoasterDynamix track, and its first test of concept. Its success in reliability as well as its popularity at the event, and later online in photography and video, guaranteed a move forward for the project, as a Youtube video racked up over 500,000 hits. At that point, though, the track was not developed for production. It would take another three years before a set would be produced.

During that time, Adam's company Brickstructures launched X-LABS Plastic Concepts. X-LABS itself stands for Experimental Labs (the ABS also is a salute to ABS plastic), and is a division of Brickstructures that is something of a LEGO Skunk Works. As Adam describes it, X-LABS is "this shadow company that is awake at night and sleeps during the day. It beta tests and pilots interesting ideas and uses the rich community that only LEGO can claim fame to as a focus group for testing the marketability, scalability and other business factors for its various projects, such as this coaster."

In fact, the LEGO Group is not directly involved in this project. While Adam made some people in the LEGO Group aware that he was working on something with coasters, he did not unveil the set and its components until Brickworld. Paal was informed a couple of months earlier and he reveals: "When Adam brought up the idea, I didn't know what to make of it, and he told me a couple of months ago he was working on a coaster thing. I was thinking, 'That's what you have been doing for the past couple of years, what's the big deal?' And I saw the pieces a couple of days ago and I'm looking, going... you're kidding."

"It was a classic moment of 'he solved the problem.' He solved the problem that I have seen, just playing with the parts, in trying to figure out a track system. He solved it."

Solving the problem took three years of design work with CoasterDynamix, and as Adam notes, it wasn't easy at times: "CoasterDynamix has their expertise and they are sure-minded about their field. I'm pretty direct and speak with a lot of my conviction about my beliefs and visions, so you can imagine there being a little bit of locking of horns and clashing at times. It's all part of the process. As long as that is used to better the product at the end of the day, that's all I care about."



Adam presenting the Rollercoaster Factory at Brickworld 2013.

He continues, “For the interest of figuring out the versions, I think we have gone through 21 design revisions and made four major changes. By no means are we at the finish line, as there is still some tweaking to do. There’s a few little revisions, maybe some expansion ideas in parts and kits that would expand the coaster idea even more, so the working relationship has been really good. We both know what we bring to the table and I think sparring on a respectful level is just par for the course. Again, it’s all about achieving the best possible product at the end of the day, which coincides with the LEGO motto, ‘Only the best is good enough.’”

Paal agrees: “I thought it was really, really cool because he had found a way by meeting CoasterDynamix and hacking their building system onto the LEGO building system. He actually found a way to make a rollercoaster gauge. We had tried before and had problems before. The coaster became too big, the rails became too big, and we couldn’t make a realistic coaster, as it became clunky. This new coaster was smooth, and it was like marrying what CoasterDynamix did in their products with the LEGO system.”

The solution was in developing a track that could be modular and adaptable. Taking his cue from CoasterDynamix, what Adam created was a track that could be clipped to supports and spacers. The track itself is not part of the LEGO system, but the supports and spacers are. It took a total of 3 parts to adapt the track system to the LEGO system. The cars are custom for the system, but will have a 2x4 stud square at the top for LEGO elements. All of this creates an elegant addition to the LEGO system.

Paal is quick to point out the advantages of the system, and also a suggestion he made:

“It’s still more like a rail—this coaster track is how a coaster is really made, with tubes that are bent and can be banked (for curves). It’s interesting to see the first parts Adam made, they built the clips, and they only could build one way. You could only go up and down and do flat curves. So I said, ‘Add a ball joint.’”

He adds: “There was an issue at the time because the ball joint, if loose, would twist and narrow the track gap at turns. The joint had to be tight, and the present joint is so tight it bends its frame a little bit, so there’s still some tweaking needed. I call this a physical beta, as we’ll learn how people will use it. Already now we have learned we should have done some things (differently).”



An early version of the coaster cross-tie.



A refined version of the coaster, before the ball joint was used for the cross-tie.

One thing that wasn't included in the Rollercoaster Factory set was the instructions. Adam had intended to include them, but simply ran out of time to meet the Brickworld deadline. The only documentation is on the inside box flap which shows a diagram of how the spacers fit in the track tube and how the joints are snapped into the mounts. After that, there isn't any guidance. In playing with the set, though, Paal states it best: "What's funny about that for me is that there's no instructions there, but wait a minute... click, click, click... you really don't need instructions because... you really need to play with it. You really need to say to yourself, what is a rollercoaster? Well, some parts need to be higher than the others... okay, do you know how to build that with LEGO bricks? Okay."

"In the beginning, you can build by making some test rig and building towers at different heights so you can figure out how you can cross-brace over here and there to make it stiffer, and then add the coaster on top. Or it could roll better if this tower was moved a little higher so you can sit and play around with it just like a rollercoaster designer, and you can add a turn or you can make it go up again. Then you can add more, like add a chain to pull up the cars."

"People have LEGO bricks at home, so this is not meant to be the first set for a LEGO user. You should have bricks beforehand. If you have LEGO bricks at home this can suddenly make you look at that bin in a different way and say, 'Wow, I couldn't make coasters before, and now I can!'"

Not having instructions also opens up the set for other uses. Paal explains, "When Adam had the first prototype, the idea was to have seats, but then you define the car as something for a person to sit in. But if it's a brick, you can do whatever you want. With studs, you ask, 'What is it?' Make it whatever you want—you can make it rigid by putting a plate between the cars. Then it won't go around turns, but maybe you want it for something, like a snake or a dragon."

"It's just amazing. Just that one idea pushes a whole bunch of different things. That's where the LEGO Group has always innovated itself by thinking what new parts or part we could bring to the LEGO system that would redefine the LEGO system. If I look at this set and look at all the parts, they can become a train now! When the LEGO Group added wheels to its system, all the elements could make cars. I thought all the sets were about houses, but now I can build vehicles. You can add an EV3 or an NXT (or RCX at the time) and the LEGO elements could be part of a robot. Of course you needed the intelligent brick and a couple of motors, but the motors were already around. The rollercoaster ride is genius because it's a few parts that can redefine the rest of the LEGO system."

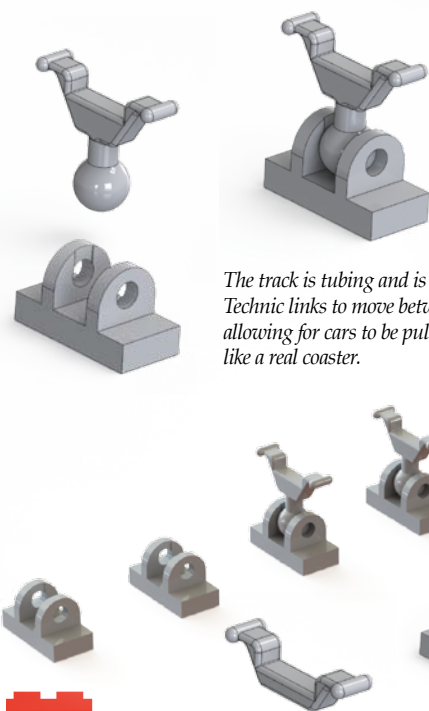
Something else not included are LEGO elements. The Rollercoaster Factory is being produced by "X-LABS," Brickstructures, and CoasterDynamix, and *not* the LEGO Group. The first 100 sets were completed literally at Brickworld—parts were delivered, then bagged and packed into sets the night and morning before launch! 900 more sets are planned for release, and from there, things are pretty wide open for the Rollercoaster factory.



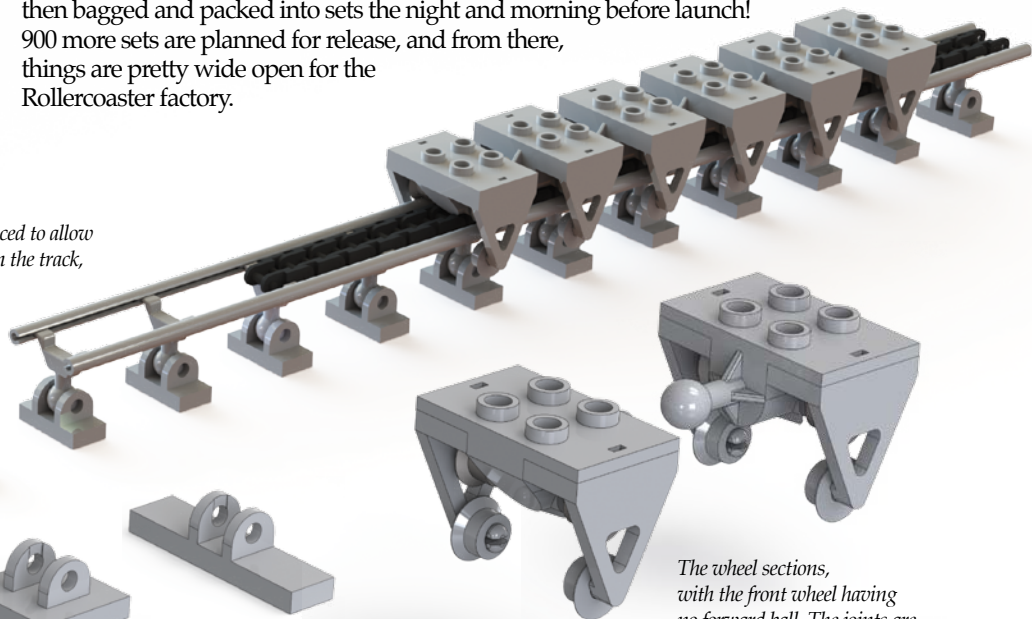
Some of the prototypes for the set are seen here, including the track cross-ties (in red).



A look at the wheels, made by a 3-D printer. At the left is a cross-tie that attached to a tile with clip. This was changed to the ball joint system below.



The track is tubing and is spaced to allow Technic links to move between the track, allowing for cars to be pulled, like a real coaster.



The wheel sections, with the front wheel having no forward ball. The joints are loose, except for the front car.

More plate connectors.

Crosstie.

For Adam, it's going forward: "My relationship with LEGO Architecture is going to start to slowly dissolve as LEGO Architecture gets absorbed into the LEGO core family of products. With that taking root fully in 2014, I will no longer be a part of it. This allows me the ability to generate these creative ideas, like we did with the LEGO Architecture theme seven years ago, but this time it's not about me. It's about bringing in creative energies from the LEGO community and external entrepreneurs that have approached me over the past few years. I take their ideas and experiment, test, analyze, beta test and then at some point under more of a professional setting, pitch the idea to the LEGO Group and see if it's something they want to embrace."

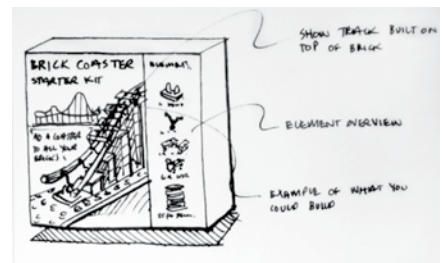
Concerning the Rollercoaster Factory, Adam is optimistic: "For me, as long as it gets done... just like LEGO Architecture, the ultimate thing was that it happened. It put some smiles on people's faces all across the US and the world, for that matter. That to me was the ultimate accomplishment, so for this, what I would love to see would be a nostalgic Coney Island Cyclone set or something exciting like the Rockin' Rollercoaster at Disney, or whatever your favorite steel is. To me it's more about seeing this happen. If LEGO decides to pick it up and run with it, obviously, it would be great to still be a creative spirit in that process to say, 'Hey, maybe we should pay tribute to the history of rollercoasters and how they got started.' So maybe doing a small scenic railway from the 1800s would be a kinda neat thing to do. Or a futuristic monorail or vertical transportation system, but I think for the guys at CoasterDynamix, with all their connections to the major theme parks throughout the United States and the world, the obvious choice would be to hopefully have a signature line of every park. Disney might be interested because of the pre-existing licensing agreements they have with LEGO, but Six Flags, Busch Gardens, Sea World, Cedar Point and all of those types of amusement parks and attractions, they all kind of have a signature ride that they brand with a really flashy colorful logo and graphics, so it would be great to be able to give to maybe a dozen parks their signature coaster that everyone kind of gravitates toward."

"Obviously at the AFOL level, it would be kind of neat to see LEGO go back to the days of the 1960s where they had service packs and we could supply, say, 500 feet of coiled rail material in neon green or hot pink or castle gray or black or whatever it is, and bags of the missing link pieces and the ball joints and that sort of thing. I'm excited about the opportunities and where it could go, whether it's service packs or expansion packs or it's really neat kits to make a wooden rollercoaster. Maybe it's a generic coaster kit where we give you enough parts that you could create a steel or wooden coaster."

"The interesting thing is that when Paal Smith-Meyer and I first brought LEGO Architecture to fruition, the mandate he was given was that we needed to expand the existing footprint where the LEGO brick was sold. LEGO should touch the hands and lives and hearts of more people. The great thing about LEGO Architecture was that LEGO products were not being sold at the Sears Tower or the Empire State Building or the Sydney Opera House, and through LA we now opened those doors to sell brick and expand the footprint. Here's a new area where the coaster concept can open doors where the brick is not being sold: amusement and theme parks. If you do some quick research like I did with LA, there's 1200 venues worldwide that could be instant candidates for retailing a possible set, not to mention Shop at Home or Brand Retail or things like that which are official lines. I think that the appeal from a business case is that we are expanding the footprint of where the LEGO brick is being sold and getting into the hands of more people. With that, obviously, an AFOL kit or service pack would not be relevant at all, because if someone doesn't have LEGO bricks, and they see the kit, they want it plug and play right out of the box, so at that level we would need a full encompassing kit with system bricks added to my new elements, and the train of course."

"So I see lots of different possibilities and layers here. It is what it is. The one thing I always do is that I don't worry about those things, because my motto is that: If you do something you're passionate about, if you do something you believe in, and you do it the right way, all of that other stuff will take care of itself."

Adam presents the box design, which is a tribute to the box designs of the LEGO sets of the '80s, with a window box to see the contents inside.



The box design started from the sketch above to the art below.



Box front.



Inside flap.





The Rollercoaster Factory set up at Brickworld 2013.



The Rollercoaster Trust: Adam (front), Jack Rimer (center) and Paal (right) at Brickworld 2010.




Another possibility for the track: a funicular! Seen at Brickworld 2013.

For Paal, it's looking back: "This inspires me because this is starting from zero. It inspires me because it reminds me of when we started LEGO Architecture together, because it was only me and Adam in the Westin hotel (Brickworld 2007). No one else knew. He wanted his girder and panel idea box which I didn't think was a good place to start because drilling a hole in a LEGO brick isn't what I wanted in an initial project with the New Business Group. What if we did something else? How else can we get there? We talked about souvenir models and architect sets and that's where we started. He had a surprise for me when I got to Brickworld—he had made the first set boxes.

"Both of us want to relive that story, because LEGO Architecture was the most fun. We are both start-up guys; I am inside the LEGO Group and he is outside. LEGO Architecture would not have happened if we hadn't met. I think this is the same for the coaster. If we hadn't met that time, none of this would have happened, and Adam would not have been an entrepreneur in the same way. No one else would have thought of a set idea the same way, and Adam would not have gone to iHobby Expo and met CoasterDynamix."

Paal continues about the Rollercoaster set: "Right now, I need to figure out the next step. I need to figure out how it would make sense to bring this closer to the LEGO building system. You put the Rollercoaster Factory and LEGO bricks together and people have a lot of ideas of what they can make. What would it be, would it be sets? We can't really say. Right now, the way the set is made up, it's wide open. It's almost like a wait and see... see what happens. I think that's the best answer."

"There are going to be people curious about this when this article comes out. When *BrickJournal* is sent, a box of issues will be distributed inside LEGO. What I am telling you now is that they don't know. So it's going to be interesting seeing how this is perceived. It's going to make our competitor scratch their head. It's going to make my colleagues in LEGO go, 'I haven't seen this before.' I think it's good because I want to shake things up a little bit." 



You can pre-order the Rollercoaster Factory at:
<http://www.therollercoasterfactory.com/>
 or scan the QR code !



Jack Rimer with a coaster in progress at Brickworld 2013.

The Rollercoaster Factory is the result of the work of Adam Reed Tucker of X-LABS and Jack Rimer and Dan Linden of CoasterDynamix. *BrickJournal* spoke to Jack about CoasterDynamix's involvement in the project and their plans for the set.

***BrickJournal:* When did Adam first start discussing with you the idea of combining coasters with LEGO® elements?**

Jack Rimer: We actually first met Adam in 2006, I believe. We were exhibiting at the iHobby Expo in Rosemont and he came into our booth. I was busy with another customer so he talked to my partner, Mike. When he left, Mike filled me in on Adam's vision to someday make a LEGO rollercoaster. He was picking our brain about the design process of our models and how we overcame some of the obstacles inherent in constructing a rollercoaster model. I was a bit skeptical about sharing what took us years to learn, but Mike said Adam seemed professional and sincere so he said they had a productive conversation. Years later, Adam approached us again at the show and we started to discuss the idea of integrating our modeling system with LEGO bricks. While it seemed like a far-fetched, yet intriguing idea at the time, we never dreamed it might actually come to fruition.

What were the biggest challenges you had to address when designing the parts for this set?

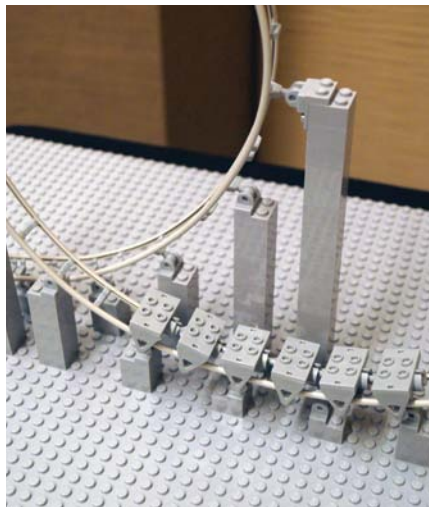
When we started to discuss how to integrate our system with the LEGO building system, I remember having about an hour-long phone conversation with Adam where we literally threw ideas back and forth at a frenetic pace until we came up with the idea for what we termed "the missing link." This was the piece that allowed the user to connect LEGO bricks to our track system. While it seems so intuitive and basic now, it actually went through many iterations to make it practical and "LEGO ish". Throughout the design process, it was the relentless desire to make the parts appear and function like LEGO parts that posed the biggest challenge. The quality and precision of the LEGO molding process is very difficult to emulate.

Making Tracks!

Article and Photography by Joe Meno



Dan Linden (left) and Jack Rimer (center) of CoasterDynamix share the spotlight with Adam at the Brickworld presentation.



A closer look at the track and cars. If you look closely, the front car's link has a 'sleeve' in it to limit motion. Jack explains this: "The front two cars have different articulation than the rest of the train for a reason. In order for the train to track straight and true and not 'bunch up', the lead car must be directly coupled to the second car on a trailered train. The real rollercoasters are this way too. So don't think something is broken or designed poorly when you get your train and it doesn't articulate as well with the front cars... it's designed that way."



The system also allows for twisting the track for corkscrews.

Even if we could make parts that looked like they came from LEGO, could we actually manufacture them to the same quality?

How was working with Adam and the LEGO Group?

Working with Adam, as with any creative team, has been both rewarding and challenging. As designers at CoasterDynamix, we have certain things we are not willing to compromise on when it comes to the functionality of our models. Some of our expectations about performance have come about after years of design and a lot of it has been trial and error. There needs to be a certain amount of efficiency for a rollercoaster system to even work. We have been reluctant to sacrifice any of this precision or efficiency in the design of the LEGO coaster. However, there are certain things we simply cannot do and still make the kit cost-effective. We also have to take into account the safety aspects of components in the kits. At first we butted heads with Adam on a number of these issues. However, after much debate, experimentation, and hard work, we have been able to overcome many of these challenges. Adam has been invaluable when it comes to making the product look "LEGO". His knowledge enabled us to capture all of the subtle nuances that characterize a part as being part of the LEGO system. He also encouraged us to think outside the box when it came to tweaking many of our long-held beliefs.

Do you see more additions to this set in the future?

We have plans to introduce a Version 2 of this system later. Before we even introduced this 1000-kit trial run, we had changes we wanted to incorporate. However, at some point you need to just release it and use the feedback from customers to help improve the product. In fact, we made a running change on the initial 1000 after the first 100 were sold at Brickworld. It was a subtle tweak to the rails to make them a bit more user-friendly. This was based on both feedback from customers and testing we did using the completed models. You have to remember, we didn't even see the final product until a day before the show! That is how close we cut it. We used our time at the booth at Brickworld to play with the system and learn what we could do to improve things.


Do you see more sets being designed?

I'm not really sure what is planned beyond Version 2 of this concept. Hopefully, there will be some interest at the LEGO Group to work with us on making a version of our system for the masses that is LEGO branded in some way.

How has feedback been for the initial set?

Feedback on the system has been remarkably positive thus far. There have been suggestions about ways to improve the system, but most of the people are simply happy to have something new to play with. We welcome any and all feedback. If this product is to become what we hope will be a strong seller, it's the input we get right now that will allow us to forge ahead. We have identified a few things that could be improved upon, but the basic concept appears solid. We have been selling our models under the CoasterDynamix name since 2004, so the system is tried and true.

If the LEGO Group chooses not to pursue this, will you continue producing and designing these?

If the LEGO Group ultimately decides that they have no interest in this, we will be undaunted. It is a fun and creative way to explore using the LEGO block or similar systems. Rollercoasters hold a broad appeal. Whether you like riding them or not, no one can deny the allure and fascination with coasters. To be able to build functioning models using LEGO bricks is just another outlet to showcase a builder's imagination and creativity. 



BUILD YOUR SUCCESS BRICK BY BRICK!

Learn more about this **GREAT**
franchise opportunity!

888-534-6722

www.BricksandMinifigs.com

Build your business on imagination and fun by owning a *Bricks & Minifigs*™ store! You will enjoy a passionate and devoted customer base plus...

- A proven turn-key model
- Low startup costs
- Protected territories



LEGO® is a trademark of the LEGO® Group of companies which does not sponsor, authorize, or endorse this ad. Franchise offer made by prospectus only.

BrickArms - Custom Minifigures - Lego - Accessories



BRICK REPUBLIC

CUSTOM WEAPONS • BUILDING TOYS

www.BrickRepublic.com



There's a Map for That!

The LEGO Group joins the celebration of the past, present and future of London Underground in a way only they could do — by mapping the Tube then, now, and in the future!

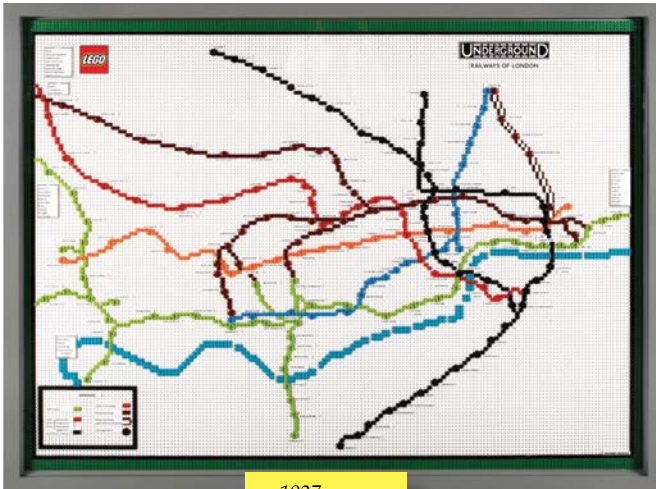
*Article and Photography
by the LEGO Group*

London Underground is celebrating its 150th anniversary this year and LEGO has marked the occasion by recreating five Tube Maps made entirely out of LEGO bricks that will be displayed in major London Underground stations throughout the summer months.

Mike Ashworth, Design and Heritage Manager at London Underground, said: "LEGO has done a wonderful job of recreating our internationally recognized Tube map. I'm sure our customers of all ages and backgrounds will enjoy looking at the five different LEGO maps that show the history and development of the Underground."

"The Tube network, like the famous Underground map, has constantly evolved to support London's growth and prosperity. The 2020 map at King's Cross St. Pancras shows the new stations and rail links we want to deliver—we hope this fun LEGO map will inspire the young engineers of the future to help deliver our vision."

Emma Owen, PR Manager at LEGO UK, commented: "We are delighted to be part of London Underground's celebrations by building the iconic Tube Map with iconic LEGO bricks. With LEGO you can build anything your imagination desires—from a simple tower to a London Tube map that helps people plan their journey around London!"



1927 map.



1933 map.



1968 map.



2013 map.

The Vital Statistics of the LEGO Tube Maps

Each map is made up of over 1000 LEGO bricks.

The LEGO Tube Maps measure 140cm x 100cm.

Each map took 4 days to build.

Each was created by Duncan Titmarsh, the UK's only Certified LEGO Professional—one of only 13 in the world!

This is not the first time that Duncan has built a LEGO map of the Tube. His first map was built in 2006 and spotlighted in BrickJournal's Volume 1 online edition, issue 7.



2020 map.

A closer look at the detail of the 2020 map.



You Can Build It


Sign Model



The five LEGO Tube maps show how the network has evolved over the years starting from 1927 through to the future, 2020. From June 12, these LEGO maps will be displayed in the unpaid side of ticket halls at four London Underground stations for all to see. Check them out at:


- South Kensington** 1927 map
- Piccadilly Circus** 1933, Harry Beck's original map
- Green Park** 1968 map
- Stratford** 2013 map
(this map is at the paid side of the ticket hall)
- King's Cross
St.Pancras** 2020 map including Crossrail, the proposed Croxley Rail Link, and the proposed Northern Line Extension

Pick up a leaflet at these stations where you will find details on how to build your own London Underground logo or "roundel" out of LEGO bricks.

The LEGO Tube Maps will be on display in the London Transport Museum later in the year. 

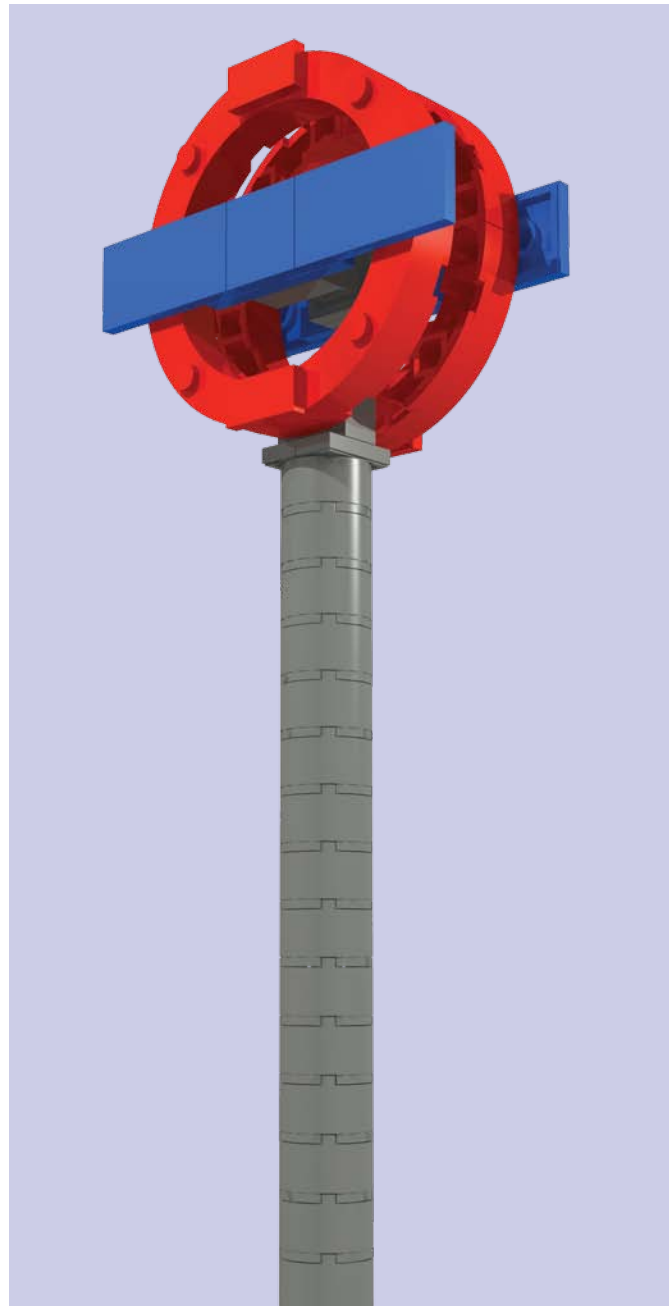
London Underground Sign

Instructions by Joe Meno

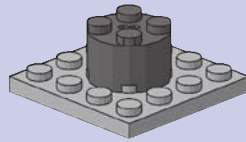
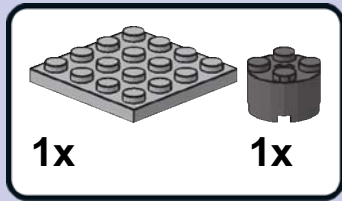
For those of us who are not in the London area, *BrickJournal* was able to get the instructions to the London Underground sign. Build it to celebrate the Tube's anniversary! 

Parts List (Parts can be ordered through Bricklink.com by searching by part number and color)

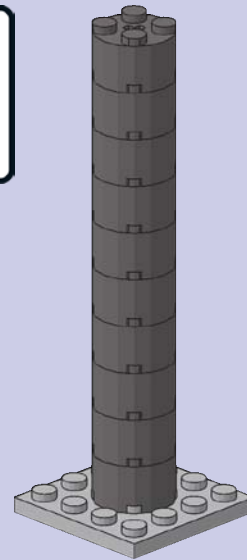
Qty	Color	Part	Description
3	Dk Bluish Gray	47905.dat	Brick 1 x 1 with Studs on Two Opposite Sides
18	Dk Bluish Gray	6143.dat	Brick 2 x 2 Round Type 2
8	Red	48092.dat	Brick 4 x 4 Round Corner
2	Dk Bluish Gray	3794b.dat	Plate 1 x 2 with Groove with 1 Centre Stud
4	Dk Bluish Gray	3022.dat	Plate 2 x 2
2	Blue	3020.dat	Plate 2 x 4
1	Lt Bluish Gray	3031.dat	Plate 4 x 4
4	Red	3069b.dat	Tile 1 x 2 with Groove
2	Blue	3068b.dat	Tile 2 x 2 with Groove
4	Blue	87079.dat	Tile 2 x 4 with Groove



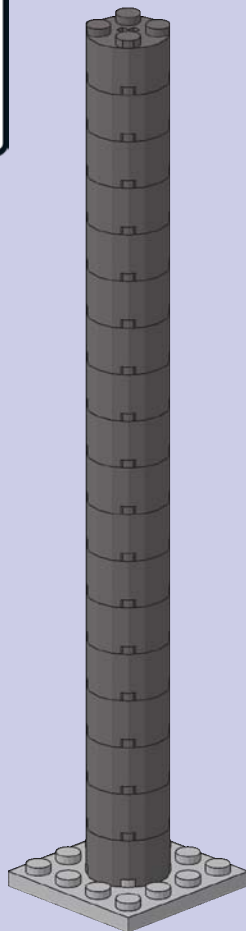
1



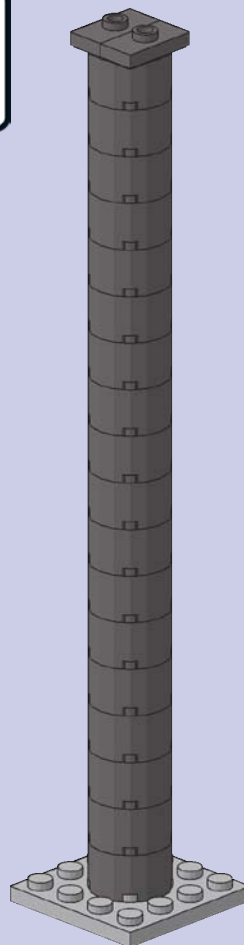
2



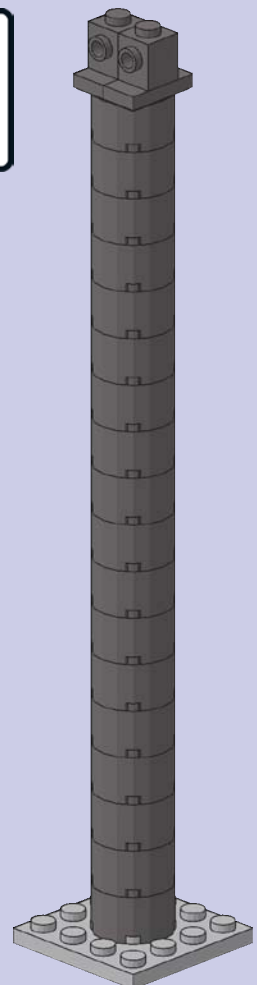
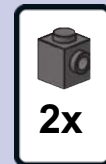
3



4

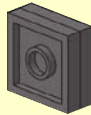


5

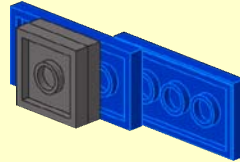
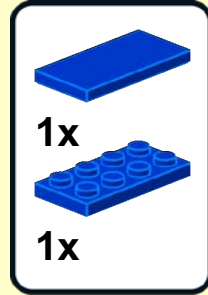


6

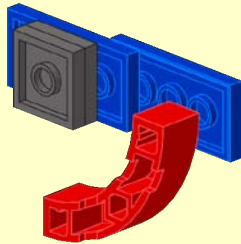
1



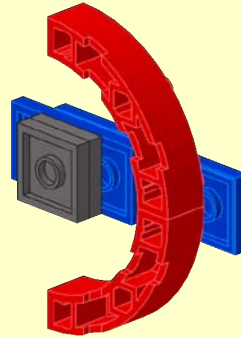
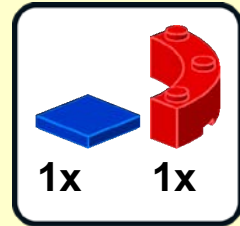
2



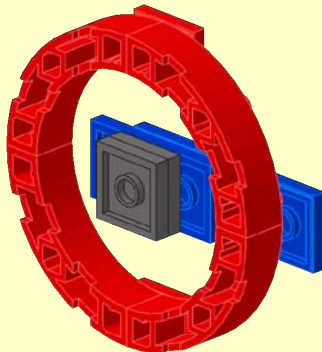
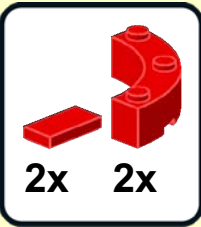
3



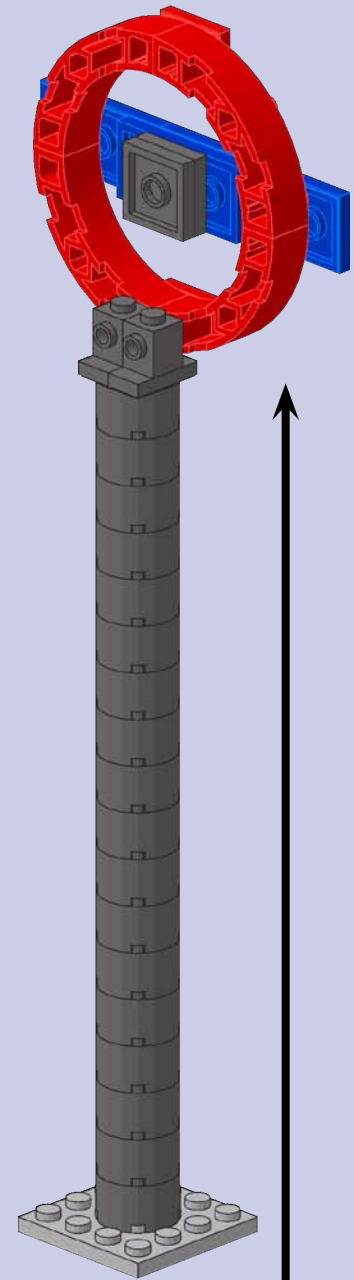
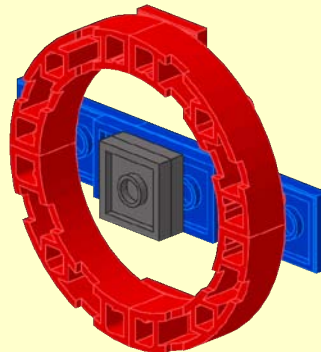
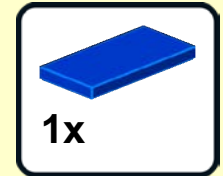
4



5

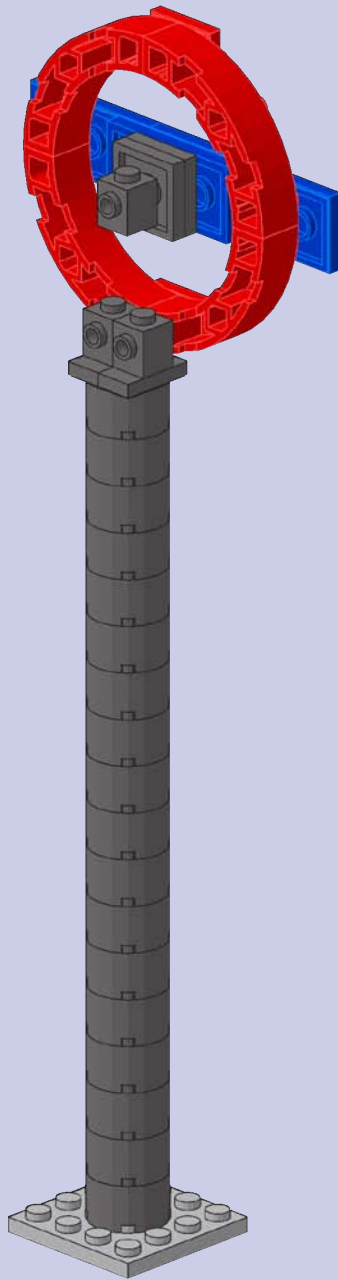


6

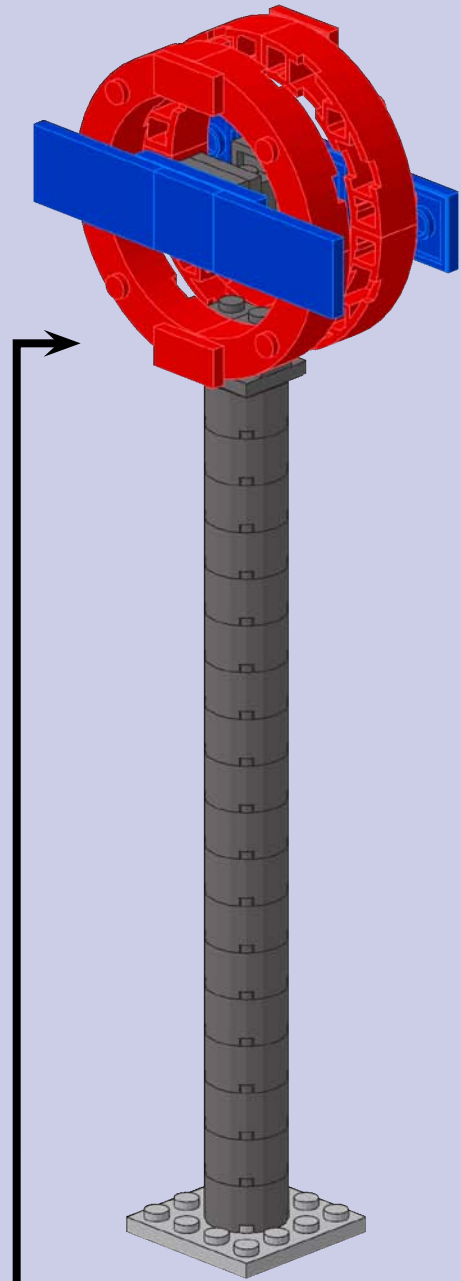


2X

7



8



BrickNerd
www.bricknerd.com

"If you're nerdy about the bricks, BrickNerd is for you!"

- REVIEWS
- FEATURE
- ARTIST BIOS
- INTERVIEWS.



The X-Wing[®] Lands in New York City!

Article and Photography by Joe Meno

Additional Photography and Art provided by the LEGO Group and LEGOLand California.

This LEGO[®] X-Wing is *huge*.

Built to promote the Cartoon Network show *The Yoda Chronicles*, this model is the largest LEGO model ever built.

I got to visit the model in a media preview before it was unveiled at Times Square in New York City over Memorial Day weekend. Hidden in a hangar in Long Island, I got a close look at the X-Wing with some other reporters. Our hosts were the team of people from LEGO's headquarters in Enfield, Connecticut who set up the life-size model. And yes, it's huge.

Getting to the hidden hangar turned out to be something of a challenge. Because of secrecy, the invitations for the preview gave no hint as to where the model was, but only to meet at New York City. I got there and was given a limo ride with reporters from a *Star Wars* fansite, Jedinews.uk. After an hour-long trip, we finally arrived at a small airport. There, in its hangar, rested the X-Wing. The only thing that was curious was the LEGO logo on the door.

We were greeted by members of the team that helped set up the model, including LEGO Master Model Builder Erik Varszegi. He and fellow Model Builder Dale E. Chasse were the main tour guides to the model. Both of them led us around, into, and eventually over the model.

Erik explained most of the information: The model is actually an enlargement of an actual LEGO *Star Wars* set, the X-Wing #9493. Expanded 42 times the size of the original, the X-Wing stands 11 feet tall, 42 feet long, and has a wingspan of 43 feet.

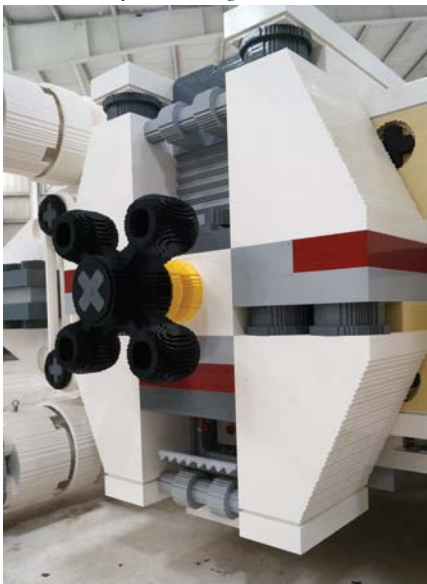


During the weekend that the X-Wing was on display, the Times Square Toys 'R Us store sold a exclusive version of the set that included a special minifigure of Yoda wearing an "I Love NY" T-shirt and box sleeve about the display. There were only 1000 of these available, so needless to say, this was a popular item.

X-Wing Specifications

Number of Bricks Used:	5,335,200
Weight:	45,979.61 pounds
Height:	11 feet or 3.35 meters
Length:	43 feet or 13.1 meters
Wingspan:	44 feet or 13.44 meters

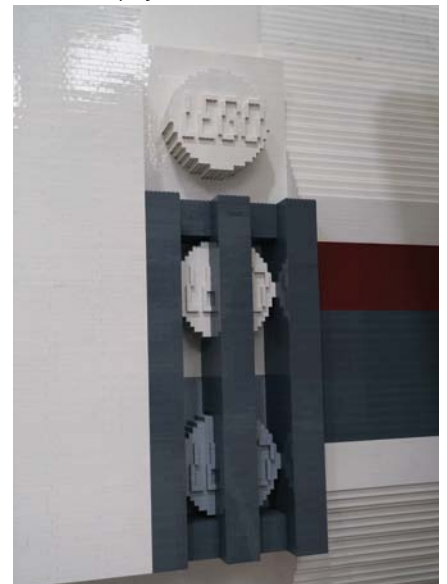
Some details of the X-Wing.



The forward landing gear bay.



Studs on display.





The X-Wing powers up for a flight.

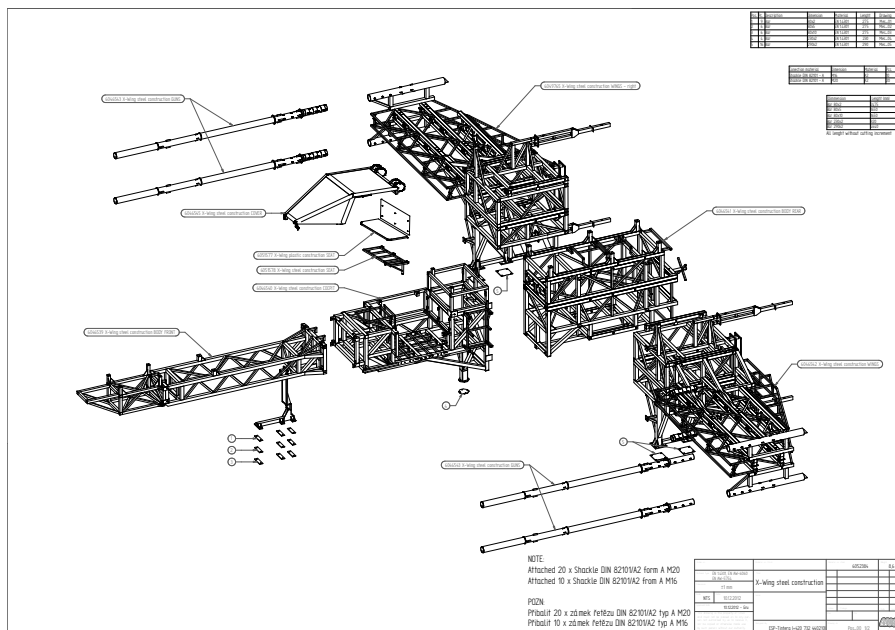


Diagram showing the metal frame for the model.



Dale E. Chasse stands by the X-Wing.

Walking around the model, I only got a couple of hints of the scale of the model. Like the set, studs are bare, but at the expanded scale, they were over a foot wide! With this scale, details were also magnified, such as the LEGO logo on the top of each stud. Technic parts that were used in the set are seen inside the front landing gear bay and by the engines in their proper color. Even the rubber bands at the rear of the wings were built, which resulted in a total of over 5.3 million bricks being used. After looking over the fighter, I asked Erik if there were any plates used. He replied, "Not many at all—most of the model was built with bricks."

Under the bricks, there is a metal superstructure designed not only to handle the weight of the bricks but also seismic shifts, as this model is ultimately destined for California. The metal work itself is a work of art, along with the laser cannons, which are aluminum pipes with attachment points for bricks. The X-Wing cannot open its wings into attack mode, as that would require mechanization that would render the fighter unstable for use as a display piece. By Erik's suggestion during the model's design phase, the wings are held together with a layer of gray bricks, which helped stabilize the wing structure.

The full sense of scale is only experienced when you see the entire fighter, or rather when you realize how far *back* you have to go to see the entire fighter. Erik commented with a smile as I stepped further and further back to take a photo, "We should have told you to bring a wide-angle lens!" Dale then invited me to get in their improvised lift (a front end loader with a wood box firmly strapped in its liftarms), and after a few moments, I was 18 feet above the X-wing.

For a brief moment, my mind went back to the scene in *Star Wars: A New Hope* where the X-Wing was first shown: in a hangar, with pilots and crew preparing these and Y-Wings for their battle over the Death Star. And seeing everyone walking around the model told me one thing; *this model is huge!*

The fighter is not just an idle sculpture, though. A light and sound system is installed into the engines so a launch cycle could be 'performed' by the X-Wing. With a low rumble by the subwoofers in the wings, the engine exhausts glow to life, as if to power up the fighter for a mission.

The cockpit is also equipped for would-be pilots. While there are no controls or targeting computer, there is a pilot's seat with a video console. With the video camera onboard, pilots can take a digital photo and send it online. When I got inside, I found that the cockpit wasn't necessarily scaled to an adult—it was a little short. But for a minifigure or child, this was a good fit.

As for minifigures, they weren't left out. Along with the X-Wing were scale models of Luke Skywalker, R2-D2, and R2-A3 from the original set. Porkins was not completed by the time the preview happened, but a flattened version of him showed at Times Square. Another minifigure that was onsite was Yoda, but instead of wearing his Jedi robe, he wore a "I ♥ NY" shirt.

All of this was planned and assembled initially one year before at the LEGO model building facility in Kladno, the Czech Republic. It took a team of 32 Master Builders over 17,000 hours to complete planning and construction of the X-Wing. After completion, the model was separated into 34 sections and shipped to Long Island. There, it was reassembled and set up for travel by a team of LEGO builders from the USA headquarters. Reassembly took about a month and included dividing the X-Wing into three sections for delivery. Setup at Times Square was done overnight, with the X-Wing revealed on the morning of May 23.



The X-Wing's cockpit.



New York Yoda loves!



Luke and Artoo look toward the model.



Erik Varszegi shows some plans at the computer.

The X-Wing spreads its wings at Times Square.





The X-Wing spreads its wings at Miniland Times Square.



Some closer views.



To celebrate the Times Square event, Master Model builders in LEGOLand California built their own miniland version of the X-Wing and placed it in Miniland New York.

Meanwhile, the life-size X-Wing remained on display for the next three days in New York City, after which it was packed for delivery by truck to LEGOLand California.

The X-Wing landed in LEGOLand California in time for the park's *Star Wars* Weekend. Parked inside a hangar-like enclosure, the model was greeted by Imperial troops and Rebel pilots when it landed June 13. It'll remain on display for the rest of 2013 at LEGOLand, inviting young and old to go to a place a long time ago in a galaxy far, far away. **t**



Landing at LEGOLand California.



Rebels and guests take a look at the newest model at LEGOLand.

The Hobbit

An Expected Review

Article by Geoff Gray



On April 29, 2013 I received an email from Jack Sadler, who was the first person to respond to my LEGO *Lord of the Rings* theme review. He thanked me for the review, asked if I would be doing a *Hobbit* theme review, and provided me with a list of his desired minifigs. Naturally I could not pass up the opportunity to review more sets derived from J.R.R. Tolkien's Middle Earth, so I got in touch with my contact and had the sets shipped out. I also rented the movie (in high definition, played through my xBox 360) to refresh my memory about it. I had seen the movie in the theaters, but (like the *LOTR* series), I want to wait until all three flicks are released in their extended cut, so I did not buy the disk. I also went back to my copy of the *Hobbit* on audio CDs and listened to the story again. I felt I was prepared to build the sets and evaluate them for my review.

Overall Design:

The *Hobbit* sets follow right along in the footsteps of many of their theme sets, where they mix "playability" with the portrayal of a story. There are plenty of moving and projectile pieces, good modular design, and (as with the *LOTR* sets) excellent accent pieces like the ring, varying swords and daggers and plenty of food, bowls, jewels, bones, etc. The sets are broken into numbered bags for simpler assembly, and there isn't much in the way of surprises with how the build progresses. The more delicate minifig accessories (such as Bofur's hat from the set "An Unexpected Gathering") come in their own bags and some of the wood grain details are added through transparent stickers.

There are a lot of characters in the *Hobbit* story, so there need to be a lot of minifigs as well. Given the fact that this story has a full troupe of dwarves that are together for almost the entire story, it is difficult to pinpoint only one or two dwarves to be the main focus for any of the scenes depicted by these sets. However, LEGO has done a good job of making sure that you get one copy of every dwarf if you pick up all of the sets (see the sidebar on minifigs for more details).

There are plenty of little hidden things to discover as you build and play with the sets. For instance, the fires that are burning the tree in "Attack of the Wargs" can be knocked off with built in sliding axles. I am not sure if these are to simulate burning embers as they fall off the tree or if they are supposed to be the burning pinecones that the dwarves toss at the goblins and wargs. The beauty is that it doesn't really matter. You can pretend either one, or something else completely if you wish.

Details:

The details, both in the set designs and in some of the individual pieces, is excellent as expected. The company is definitely investing heavily in this theme, and I believe it will really pay off.

My favorite set is Bilbo's hobbit hole ("An Unexpected Gathering"). The inclusion of the rune scraped onto the door is a nice touch, as is the inclusion of so much food. Given hobbits' proclivity toward food, you would expect to see a bunch of it in this set. There's even a pretzel, which is indeed a rare item right now, showing up in only 4 sets, one of which was an exclusive set for the opening of a LEGO Store in Germany.

One of my favorite constructed items is the wrought iron window in the study of Bag End ("An Unexpected Gathering"). The window uses a transparent 4x4 round plate with 2x2 round hole as the base, a 2x2 clear round plate with rounded bottom, and 4 black turntable 2x2 base parts. These fit inside a couple of arches and provide the illusion of an intricate window. This item also shows good use of SNOT design and the use of incorporating construction where a constructed item can be integrated into the main model by simply sliding it into place and holding it by surrounding it with other attached pieces (to see the steps I am talking about, you can view the building instructions on LEGO's website: <http://service.lego.com/en-us/buildinginstructions/>).

There are also some very nice details directly in several of the molded pieces. For instance, the elven daggers wielded by Tauriel have a golden inlay on the silver blade area. The hair/beard piece for the Bombur minifigs includes printing that mimics his shirt inside the braided beard, as well as the round bald spot on the top of his head. Bofur's hat and Oin's hair/beard show similar detail and use of multiple colors. Bifur's beard is especially impressive since they managed to make the braids inside the beard have a mix of black and silvery/gray hair. There is plenty more to discover as well.

There is even a non-minifig specific piece designed solely for the theme; the netting that is used to hold the dwarves ("Escape from Mirkwood Spiders"). By the way, if anyone is aware of other pieces that are available only in the Hobbit/LOTR theme that are *not* minifigs specific, please send me an email (geoffgr@brickjournal.com) and let me know.

Conclusion:

If you are a fan of Middle Earth and a fan of LEGO creations, this theme is well worth looking into. And if you are a collector, then it is a must-have. I stated in my last review that I was planning to make the LOTR/Hobbit theme the one theme I collect every item, and TLG has not made me regret that decision with these sets.

I should also mention that I have completed the LEGO LOTR video game, managing to acquire every single player achievement available. So I am ready for the Hobbit video game (and I will bet that is coming soon too!). As a side note, I found the LOTR video game to be the best game in the LEGO series I have played yet. I liked the way they used real audio tracks from the movies to help augment the cut-scenes (even though some were a bit cheesy) and I think they did a good job following the storyline. I had difficulty with a couple of the sections (involving jumping onto and off of ropes and platforms way up high), but I finally finished. Of course, that now means that T.T. now needs to release the Hobbit video game. I assume that since the LOTR game covered all three movies, they will have to do the same for the Hobbit game. Hopefully we do not need to wait until they are all 3 released, since that will likely be at the end of 2014.



The detail on Bombur (above) and the inlay pattern for the Elven daggers (below) are good examples of the attention to detail.



An Exclusive From Target Stores

For those of you that collect minifigs and want to get all of them, there are a couple of places you will need to look. You may already be aware of the exclusive Elrond minifig from the LOTR videogame. Well, there's also an exclusive Bilbo Baggins that you can only find at Target stores (I do not know if it is available online through Target).



From The LEGO website

On the product page for the Hobbit, you will find a category for games. There are two little games you can play online here. They're kind of cheesy, but sometimes I just need some mindless activity.

(<http://thehobbit.lego.com/en-us/games/the-halls-of-the-goblin-king/>)



Minifigs

Here is a list of the minifigs that are included in the various sets:

Bilbo Baggins - Suspenders

Bilbo Baggins - Dark Red Coat

Gollum - Narrow Eyes

Goblin Soldier 2

Tauriel

LEGOlas Greenleaf

Fili the Dwarf

Kili the Dwarf

Yazneg

Hunter Orc

Thorin Oakenshield

Bifur the Dwarf

Goblin King

Goblin Soldier 1

Goblin Scribe

Ori the Dwarf

Nori the Dwarf

Dori the Dwarf

Hunter Orc with Quiver

Dwalin the Dwarf

Bombur the Dwarf

Bofur the Dwarf

Mirkwood Elf Guard

Mirkwood Elf Chief

Gloin the Dwarf

Oin the Dwarf

Balin the Dwarf

My wishlist of minifigs from the Hobbit:

Radagast the Brown

Azog

Galadriel

Thranduil

Beorn (human)

Beorn (Bear)

Necromancer

79002 Attack of the Wargs

Help Thorin and company escape from his nemesis, Yazneg in this wonderfully detailed set. 400 pieces

Can you spot the problems with this set?

Yazneg, pictured on a white warg, is portrayed in this set as doing battle with Thorin and company in the forest just before the eagles rescue them. The problem is that Yazneg is not the main nemesis. Azog is. Further, Yazneg was killed by Azog for failing to capture Thorin before this scene happens in the movie. So why is the set designed this way? Because originally Yazneg was going to be the lead of the warg riders, but Peter Jackson decided to change the script, after the set design had been completed. (information courtesy of <http://lotr.wikia.com>)



79000 Riddles for the Ring

Can you figure out the riddle in time to avoid getting eaten by Gollum? 105 pieces



79003 An Unexpected Gathering

Enjoy a feast in the comfortable hobbit hole of Mr. Bilbo Baggins. But be sure to clean up the dishes when you are done. 841 pieces



79001 Escape from Mirkwood Spiders

Will you be a dwarf trying to escape the spiders, or a wood elf getting annoyed by the dwarves interrupting your dinner feast in this preview set? 298 pieces



The appearance of LEGOLAS

"Escape from Mirkwood Spiders" and "Barrel Escape" are preview sets. The scenes they depict come from the second movie, called *The Desolation of Smaug*. The movie trailer has been released and the movie will come out on December 13, 2013. Fans of the original book will notice that the character of LEGOLAS (in set 79001) is not from the book. However he does show up in the movie. Peter Jackson justifies his appearance by stating "He's Thranduil's son, and Thranduil is one of the characters in *The Hobbit*, and because elves are immortal it makes sense LEGOLAS would be part of the sequence in the Woodland Realm."

79004 Barrel Escape

Free the dwarves from the Elven King's Dungeon and float them down the river in this preview set. 334 pieces



79010 The Goblin King Battle

Play as Gandalf, trying to save the dwarves from the evil Goblin King in this underground set. 841 pieces



Building



Photography Setup: Using light sources on opposite sides reduces the presence of shadows.

Minifig Customization 101: Photographing Your Customs

*by Michael "Xero" Marzilli
& Jared K. Burks*

*Photographs
by Michael "Xero" Marzilli*

It has been some time since this series has covered capturing images of custom minifigures. Don't have a fancy DSLR or even a digital point and shoot camera? No problem! Almost everyone has a cell phone, tablet, or hand-held gaming device that has a camera. Here are a few suggestions on how to get the best pics possible out of whatever device you have. Remember, the best camera is the one you have with you! Several different tips and tricks will be presented to help capture your work the best way possible.

1. Take Care Of Your Camera Phone/Device.

Keep the device's camera lens clean, especially free of fingerprints. Most of us carry our cell phones in our pockets with keys, change and several other items. Dirt, pocket lint or any number of other items can scratch, smear on or cover the camera lens. The first step in a clear image is shooting through a clean lens!

2. Lighting, Lighting, Lighting!

To take good pictures with your phone/device you need light, and a lot of it. The reason is that the sensors inside phones/devices are very small compared to the ones you find in point & shoot cameras and big DSLRs. Smaller sensors capture less light which leaves the potential of getting a lot of "noise" or grainy, unclear images. The more light you have available, the clearer and brighter your pictures will be. However, avoid getting direct light into the lens or putting your subject too close to a light source. Your pictures will be overexposed, meaning one side is too bright while the other is too dark. With that being said, if possible, avoid direct sunlight.

3. The Closer To Your Subject, The Better

One of the most common mistakes with images is that their subject ends up being a tiny, unrecognizable object in the distance. Remember that most LEGO figs are approximately 2 inches tall to begin with. It's difficult to see and appreciate

the detail in a figure if we can't see it! Phone/device images tend to be small due to low resolution of the camera (although this is changing)—so fill up your viewfinder with your subject to save having to crop in on the subject in editing it later (which decreases quality even more). Also, do not use your digital zoom function. This will decrease the resolution of the original photo and there's no amount of editing that will correct pixelated low resolution.

Having said this, getting too close on some model camera phones creates distortion and focusing issues (particularly if the phone/device doesn't have a macro setting). To avoid blurry or tiny pics, find that distance 'sweet spot' to ensure the best quality. This will differ from device to device so practice is key!

4. Stabilize Your Phone/Device.

While you're taking a photo, put the device or your arm on a flat, stable surface to make sure the photo doesn't come out blurry. If you can't find a stable surface, hold your arm against your body. A twitch, a cough or even heavy breathing could be the difference between a sharp and blurry picture. *Keep Track of the Shutter Release.* By shutter release, I mean the time it takes for the camera to capture the image after you press the shutter button. If the shutter button is on a touch screen, the shutter will probably get tripped after you lift your finger. More often than not, such 'tripping' can be cured by keeping your hands as steady as possible. Many devices have a secondary shutter button, so play with all the options and use the one that gives the clearest photo.

5. Adjust the Settings

When it comes to photo settings, most phones and devices are now imitating the features of high-end cameras. Of course, the effectiveness and desired effect varies. The most basic setting that should be utilized if available is the Macro setting (previously mentioned). Typically this is indicated by a tiny flower icon. Make sure to select this option to alter the camera's focal point to a shorter distance.

The next setting to be concerned about is ISO, which is an older term that denoted the speed of the film in relation to its sensitivity to light. While digital photography doesn't use film, a similar value is still used. The ISO setting, by default, will be set to "auto." When shooting in direct lighting, you can set the ISO to the lowest value (to avoid grainy, or "noisy", images). But in poor light, use a higher ISO. Keep in mind the higher the ISO number the longer the shutter stays open, which in turn means you must be *very* still while taking these low-lit pictures; another reason that lighting is so important.

Another critical setting is HDR (High Dynamic Range) imaging. This method captures a greater dynamic range between the brightest and dimmest areas in a field of interest or subject. Using this setting gives a more accurate range of the intensity levels found in the figure and will help when it comes to editing. Non-HDR cameras take pictures at one exposure level with a limited contrast range, which results in the loss of detail in bright or dark areas of a picture. HDR compensates for this loss of detail by taking multiple pictures at different exposure levels and intelligently stitching them together to produce a picture that is representative in both dark and bright areas.

Changing the bulb color in your lamp is an easy way to get very different effects in your photographs, as seen below.



Depth of Field (Near, Far, and Focus): By controlling the depth of field, visual interest is controlled. Use this to highlight those little details that make your custom figure unique.



6. Apps are Awesome...

It doesn't matter if you have an iPhone, Android, or Windows phone, there will be hundreds of apps available for your phone/tablet which will enable you to really take advantage of your camera. Some can completely replace the camera app on your phone and offer some amazing features and tricks which you didn't think could even exist. Download a number of free or pay photo editing apps and start editing your pics to your heart's content. You may not be an expert in Photoshop but that doesn't mean you can't let an app do the work for you. Editing apps let you adjust a number of settings and add filters to your pics, providing dramatic effects. Try them out and find the one that works best for you.

7. But if Apps Don't Do The Trick...

While it's fun and easy to use your phone or devices' built-in or downloaded editing software, editing pictures on your computer will almost always produce better quality images. Remember to always take your shots in color and at the highest resolution possible to keep all your editing options open.

Now that you know how to optimize your photography, show us your customs! 



You can go to Jared's webpage by going to <http://www.fineclonier.com/> or scanning this QR code!

Jared's all-new sequel on minifig customizing!

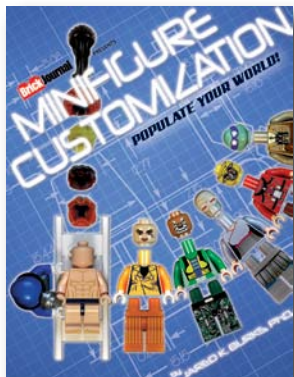
The original **Minifigure Customization: Populate Your World!** book (still available) shows a wide range of techniques you can use to alter the lovable LEGO® Minifigure. Now, *BrickJournal* columnist **Jared K. Burks** presents the sequel—**Minifigure Customization²: Why Live In The Box?**—offering more advanced techniques to alter minifigures:

Why Live In The Box?—offering more advanced techniques to alter minifigures:

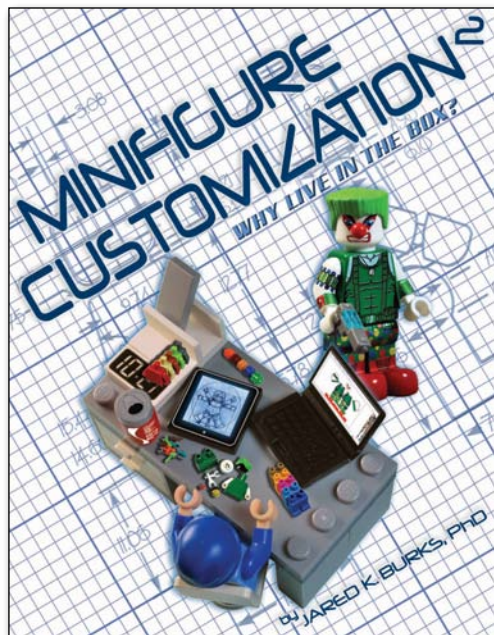
- Virtual customization, and designing decals
- Custom part modification and creation
- 3-D printing and painting techniques
- Lighting with LEDs or EL wire
- Ideas on displays and digital photography
- Plus a custom gallery with tips & tricks!

Don't live inside the box—populate your world with any alien, superhero, historical, action, horror, or science-fiction figure you can “just imagine”!

(84-page FULL-COLOR Trade Paperbacks) \$9.95 each
(Digital Editions) \$3.95 each



NOW SHIPPING!



SHIPS IN NOVEMBER!



TwoMorrows—A New Day For LEGO Fandom.



TwoMorrows Publishing • 10407 Bedfordtown Drive • Raleigh, NC 27614 USA • 919-449-0344 • FAX: 919-449-0327
E-mail: twomorrows@aol.com • Visit us on the Web at www.twomorrows.com

DIY Light Tent:

Take Lighting to the Next Level!

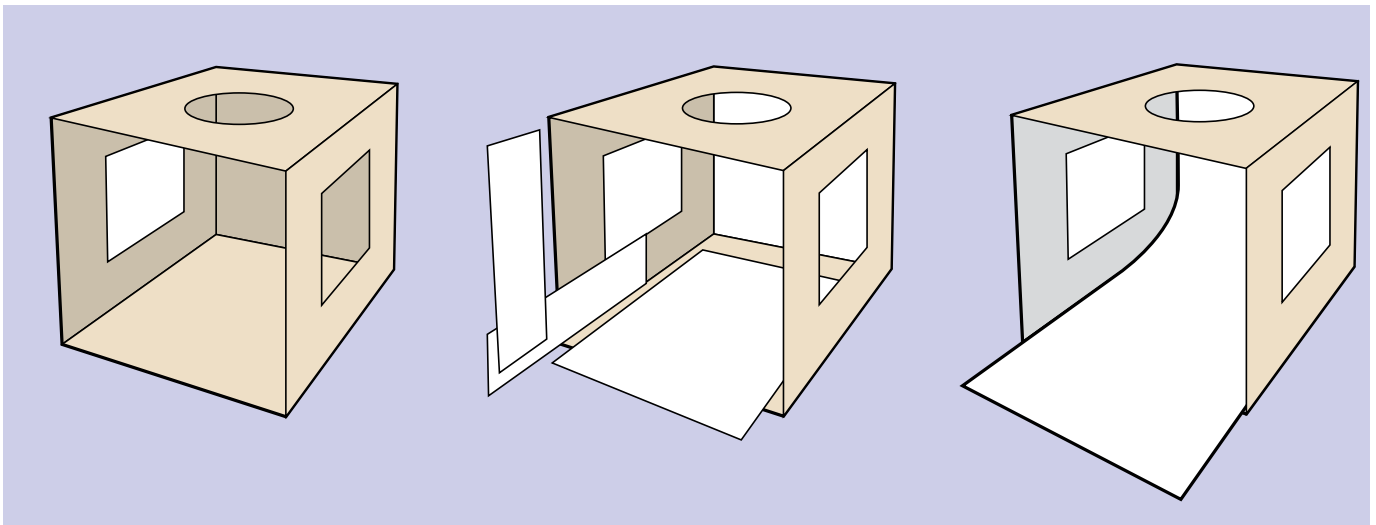
Building a Do-It-Yourself light tent (also called a soft box) is very simple, inexpensive and will create a method to properly light your customs for photography. Most of the items needed to make a light tent are lying around your house. Here's a quick list:

Materials

Cardboard box
Construction Paper
White Bristol board
Wax Paper / Fabric
Light Source (Various colored bulbs)

Tools

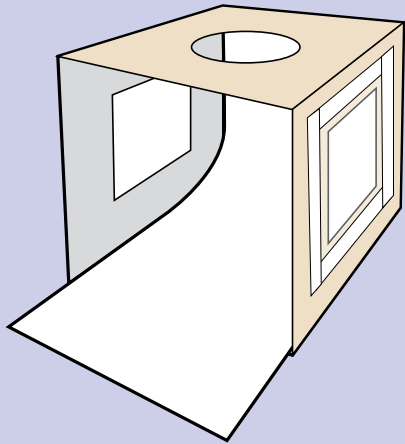
Tape (scotch, double-sided, masking, painter's tape)
Glue / Glue stick
Ruler / Measuring Tape
Pen / Pencil / Marker
Scissors
Knife (X-acto)



The cardboard box can be any size you want as long as you have enough light(s) to fill it. First, take the cardboard box and measure 2 inches in from each side using a marker on two sides: left and right. Connect the marks, which will result in a square (or rectangle, depending on box size) in the middle of the box. I cut out these regions on both sides of the box. Do not mark or cut the bottom of the box. As for the top, mark and cut it based on the size of the light you will be using. Once you have your all your marks connected, use your X-acto knife to cut these center sections out and remove them. Take your time and do your best to make the cuts as straight as possible. At this point you can remove the flaps of the box on one side; this makes the box open on one side.

Next line the inside of the box with white Bristol board (or white construction paper); this will reflect the light and is more durable than white paper. Using the measuring tape and marker, measure out two-inch strips on your white Bristol board; be sure that the board is long enough to fill the height and length of whatever box you have used. Since you cut two sides of your box you should need 8 two-inch wide strips, four for the inside of each side. As the opening in the top is custom to your light source, be sure to replicate this for the Bristol board that will be covering the inside of the top. A glue stick or double-sided tape can be used to hold the Bristol board in place. Don't worry about overlapping strips or if the strips extend beyond your openings; it doesn't have to be perfect, but feel free to trim them to fit flush.

Now that the inside of the box has been lined in Bristol board (or construction paper) it is time to create the backdrop. Using Bristol board cut it to the inside width of the box, making sure it is much longer than the box. Place the long piece of Bristol board / construction paper into the box to where the piece curves and covers the entire bottom and the one side of the box that you did not cut a hole in. This is your backdrop. Avoid creasing as it will show up in your photos. You're looking for a nice smooth gradual curve here with plenty of room for the subject to sit/stand perfectly flat on the bottom of the box. Trim the excess board / paper that is sticking out the front of the box. Using painter's tape to hold the backdrop in place is a great option as it allows for its easy removal. This way different color backdrops can be used depending on the color of the subject. It can be very difficult to get good separation between a white clone trooper and a white backdrop.



The final step in creating a light tent is to cover the side and top holes with light diffusing fabric. This can be nearly any type: white nylon, white fleece or white muslin fabric. Fabric is inexpensive at local fabric stores, but if you really want to pinch pennies there are a few options. One could use white under shirts, cut up the sides so you have two halves of the shirt to work with. If you use multiple shirts, be sure that the color matches or your end result may be uneven light diffusion inside your box. Ordinary wax paper could also be used. Measure your holes and the opening at the top of the box and cut your wax paper/fabric to be slightly larger than these measurements; I suggest at least half an inch of overlap all the way around. With your masking tape, tape all four sides down ensuring that the fabric/paper is tight and there is little or no slack. Any slack may cause odd shadows as the light will have a tough time diffusing uniformly through the material. Remember to *not* cover the hole facing your backdrop! This will need to be open so you can manipulate your subject and photograph through!

There you have it: a light tent! 📷



Example of a light tent. This particular tent is not lined due to its large size. Images correspond to the light effect images presented earlier.



Note that photographing black figures on a black background would be difficult. Not only can the background color be exchanged, but visual interest can be easily added with a decorative backdrop.

Next Time:

Minifig Customization 101 – Collectible Minifigure Series



I was asked to do a follow-up of my 2005 castle building interview with Magnus Lauglo which appeared in the second online issue of *BrickJournal*. That article can now be found in *BrickJournal Compendium 1: Issues 1 - 3*, pp. 83-6. In that article I talked mostly about how and why I got started modeling real medieval castles in LEGO. In this article I'm going to concentrate on how I build castles—something of a tutorial on my techniques, which have matured, and I think improved, over the past 27 years.

One of great joys of working on this issue has been the chance to see the incredible number and variety of castles that have already been created! I have not been much for connecting with other AFOLs in the castle or any other LEGO realm—possibly it's a manifestation of growing up in the pre-internet days. The fact I have a website displaying photographs of my model castles at all is that it was created as a birthday surprise from my older son Scott and his then-girlfriend Anne Sullivan. Doing research for this issue of *BrickJournal* has not only been eye-opening, but it appears that there are many more AFOLs building fantasy castles than those of us modeling real castles.

Early Plans

I have always used pencil on 1/8" graph paper for my plans and elevations. I experimented a bit years ago with James Jessiman's LDraw software program, but found it too time-consuming when designing a wall containing hundreds of elements. I initially did plans only [i.e. no elevations]

Building Castles

*Article and Photography
by Bob Carney*

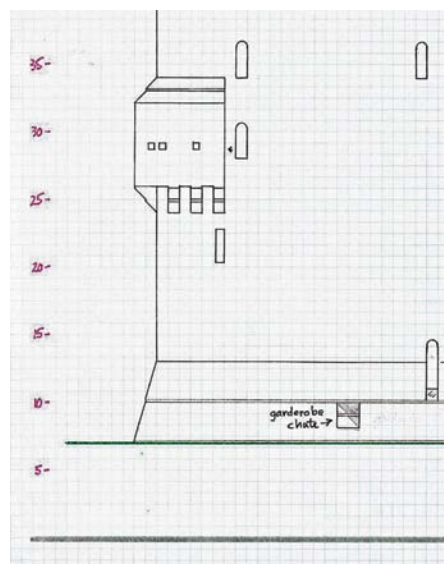


Figure 1: An elevation showing brick levels.

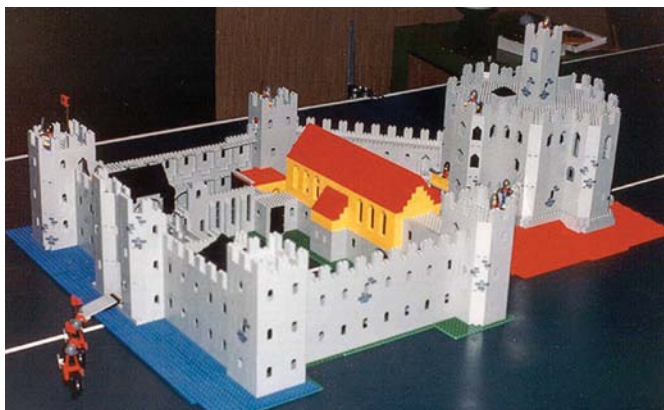


Figure 2 - An initial castle using castle wall panels.



Figure 3 - A beginning landscaping effort.



Figure 4 - Adding a little more.

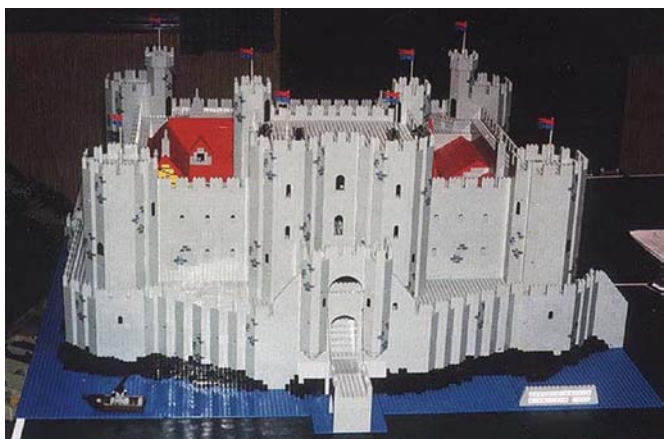


Figure 5 - Adding a moat and rocks.

for the first seven castles, with little arrows all around the perimeters indicating the location, size and floor level of all the windows and doors. I then began to draw some elevations, with a graph paper square equaling 1 brick. Of course my elevations were 20% too squat, as LEGO bricks are not square in height.

Very quickly I began to mark a scale on the end of every elevation, counting up six squares and marking "5", six more squares as "10", seen in Figure 1, and so on until I was above the tallest turret. By marking my levels at 1.2, 2.4, 3.6, and 4.8 squares [0.4, 0.8, 1.2, etc for plates] I was soon creating accurate elevations with only an occasional mistake that required gentle erasing!

Dan Vallauri of Monaco came up with a brilliant Excel® spreadsheet several years ago that was 64 bricks wide [2 baseplates!] on a portrait-oriented 8½x11" page (by 79 bricks tall). He hoped LEGO might be interested in reproducing it so AFOLs and designers could work at 1/3 scale (versus full size with LEGO's current elevation paper) but it apparently went nowhere.

I'm certain that LDraw and other CAD programs (such as LDD and MLCAD) have made huge improvements in the past few years, and if I was marketing my designs, I'm sure I'd be an enthusiastic user of at least one of these fine programs.

Utilizing Your LEGO Elements Wisely

Because my desire to build castles greatly exceeded my accumulation of LEGO elements in the early days [mid-1980s], I made liberal use of LEGO's 2x5x6 castle wall panels [even more so than LEGO Group, which had utilized nine in the #6074 Black Falcon's Fortress, of which I had fairly quickly purchased more than 20 sets]. It compromised the look of the structure (and its security for that matter) as seen in Figure 2, but definitely made up for my lack of LEGO bricks.

While some early castle builders were using the classic 2x4 bricks as their mainstay, I felt that element was somewhat large in proportion to the minifig serfs who would be constructing the castle. I therefore picked the light gray 1x2 brick as my basic block for building. I immediately began to stack alternate rows of 1x2 bricks, and 1x4/1x6/1x8 bricks [used randomly], which served both to better utilize my LEGO and to make long walls much less prone to flex!

I have occasionally added a smattering of random light bluish gray LEGO 1x2 bricks and Tycos slightly pinkish light gray 1x2 bricks for a subtle color change, but there are also numerous castle builders who liberally mix various LEGO earth tone bricks with a very nice effect on their castle walls.

Landscaping

I did very little landscaping during the first year of building, with the first major landscaping being the Château de Tarascon (southern France; #13), Figure 3, though I did perch the cross-shaped donjon at Warkworth (#3) on a square motte made of red 45° slopes, seen on Figure 2. Clifford's Tower (#29) ended up on a bit of a green motte in 1990, figure 4, and Harlech (#42) on a black rocky terrain in late 1991, figure 5.



Figure 6a - Newcastle-upon-Tyne.

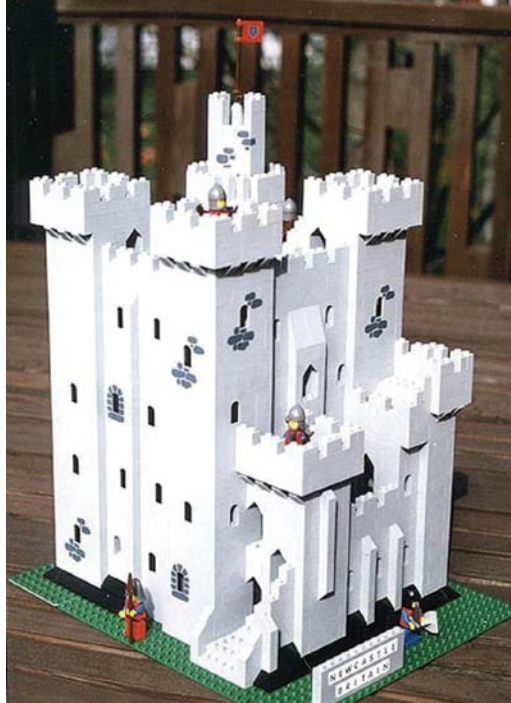


Figure 6b - my first build.

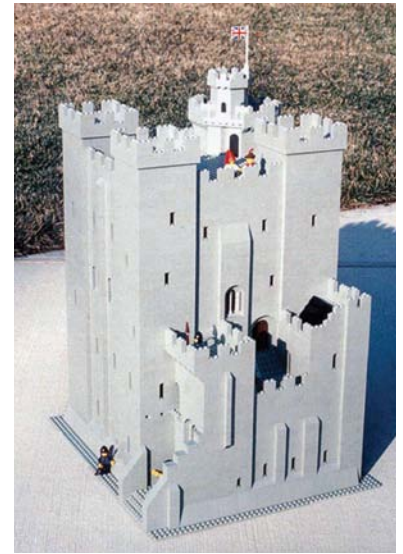


Figure 6c - My second build in 1992.

The first castle I built that I am still proud of was #43, the larger rebuild of the Keep at Newcastle-upon-Tyne, seen in figures 6a through 6c. The gauntlet had been thrown down by me—for me, and thereafter I did not want to build any model that was either inaccurate or less than my best effort. Landscaping could no longer be done with red slopes, bricks and plates. Green was for grass, and dark gray and black (often mixed) for the earth's crusty outcroppings where castles were so often placed, as seen on figure 7.

It's often a nice break to build a water castle just because the terrain is flat by nature! But it's just as often intense fun to spend days and days landscaping a castle before a single stone [well, LEGO brick] is ever laid (Figure 8), hoping you've correctly calculated the dimensions of the mound *and the castle!*

My sole foray into studless landscaping (Burg Prunn #123) was a great success (Figure 9), but very time consuming and brick-intensive, and so far I've not seen the need for a repeat of the process. But I really liked the result.



Figure 7 - Landscaping becomes realistic.



Figure 8 - Landscaping becomes complex.

Figure 9 (left) - Studless landscaping.



Figure 10 - A model too far.



Figure 11 - A portcullis.



Figure 12 - A yett.

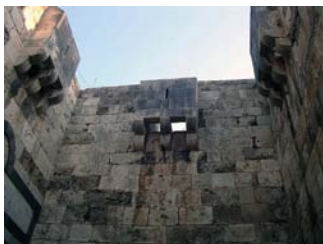


Figure 13- A machicolation.



Figure 14 - Murder holes.



Figure 15 - Wall corner panels.

Figure 16 - The Black Falcon's Fortress.



Choosing a Project

As noted in the 2005 article, almost all of my castle research the first years was in American libraries. I skulked in the stacks of libraries in and around Illinois, where I live, and also in cities such as Ann Arbor and San Francisco when I was there at medical meetings. Most of the books were in English, and my best information was about castles in the United Kingdom and Ireland.

Happily the internet has dramatically changed the amount of information available to everyone. For example, of the 64 château-forts I have chosen to visit when travelling to France later this year, I have found plans for 44, 34 with dimensions! A huge change from just a few years ago.

As I mentioned earlier, the first model of which I am really proud of is my 43rd. That was the end of my eighth year of building castles and I was certainly having a splendid time with my growing LEGO collection all those years. For those who are just starting, patience is a great virtue. With the model of Newcastle Keep, I was finally able to say "Wow, this could be the real thing in miniature." The bar had been raised and I relooked at all my previous work with the question "Should I build that castle again?" In exactly half of those models, I have rebuilt the castle bigger and better!

The shape of the castle is of great importance. Many castles were perched atop a rocky crag or similar high ground to enhance the defensive quality of the fortress. The result is that many castles are oddly shaped to conform to the terrain. The use of hinges allows the creative castle builder considerable leeway, but the soundness and mobility of the MOC may suffer greatly. A few castles seem too daunting for even my consideration: Aguilar Castle, Figure 10, in the mountains of southern France comes to mind.

The Castle Itself

In another article in this issue, I address windows, arrow slits and parapets specifically. They are just three of the things to consider when creating a sound defensive and protective structure. For the modeler of real castles such as myself, the original architect of the castle many centuries ago did his best to consider the practical features of the structure he was in charge of building. For those who design and build fantasy castles, the entire job is theirs alone. I must do that job only when a castle is so ruinous so as to have major features obliterated—and I then get to try to decide what the original looked like in its heyday.

Given the difficult job of creating castles that are exciting and affordable, TLG has done an awesome job with gatehouses and turrets. It is important to note that the entrance is the most vulnerable spot in any castle, and drawbridges, portcullises (Fig. 11) or yetts (Fig. 12), machicolations (Fig. 13) and murder holes (Fig. 14), and doors should be used liberally and in combination.

The impetus for me to dedicate a huge portion of my life to the construction of scale model medieval castles was the appearance of 10 3x3x6 castle wall corner panels (Fig 15) in the **6074 Black Falcon's Fortress** (Fig. 16), which was released in early 1986. The ability to create octagonal, round, and D-shaped towers and turrets was to change my life. My first 130 castles utilized this wonderful panel in light gray, dark gray, black, yellow, red and/or tan [=sand yellow] in myriad combinations.

The lack of windows in the element eventually led to my decision to use hinge bricks and plates to create towers. My first attempt was my third build of Bodiam Castle in Sussex, England (Fig. 17). This technique allows for accurate placement of both windows (Fig. 18) and arrowslits (Fig. 19) in your towers.

I have always been amazed at the parapets of The LEGO Group's castles and castle related sets. Sadly every one of their castles over the past 30 years, including the just released 70404 King's Castle (Fig. 20), feature battlements so squat as to leave the soldiers on the wallwalk sitting ducks for an arrow from even William Tell's cross-eyed brother. Remember a happy, effective garrison is a living garrison! We'll look more closely at embattled parapets in the window / arrowslit article in this issue of *BrickJournal*.

The Castle as a Residence

This is an issue that most of you will address as you construct beautiful castles from your LEGO collection: Does my castle or tower need to sustain my minifigs [royalty and minions] for hours, days, weeks, or God forbid through a siege?!

Whether you model real castles or let your creative juices flow into fantasy castles, realism is most important. Will your castle be lived in year round or just during times of invasion or other stressful events? Don't forget store rooms and a well [Nottingham Castle had three]. Don't forget that kitchen fires were common, so place your kitchen and ovens accordingly. And don't neglect to add garderobes—it's no fun trying to sneak out to an outhouse during a siege!

Torches and fireplaces for lighting and warmth are very important, since windows are necessarily small and 6 to 10 foot thick walls chilly and often dank. Interior walls were usually painted or covered with colorful tapestries. Don't neglect your servants and garrison—they don't require pampering, but you'll need their loyalty.

Stables with a talented blacksmith will keep your horses fit for travel or battle, and if your castle is in a Celtic country, consider a bawn wall to protect your sheep and other animals from thieves.

In Summary

Building castles, whether real or imaginary, is a very exciting and rewarding hobby, and LEGO is a wonderful, reusable medium with which to build castles. The possibilities are endless, and the joys of creating beautiful and/or foreboding structures are almost overwhelming.



Figure 20:
70404 King's Castle



Figure 17 - Using hinge bricks and plates to build towers.

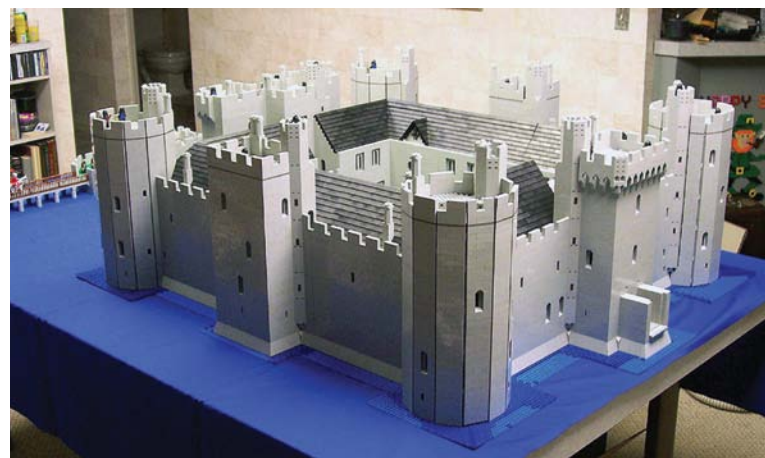


Figure 18 - Completed castle with custom windows.



Figure 19 - Completed castle with arrow slits.

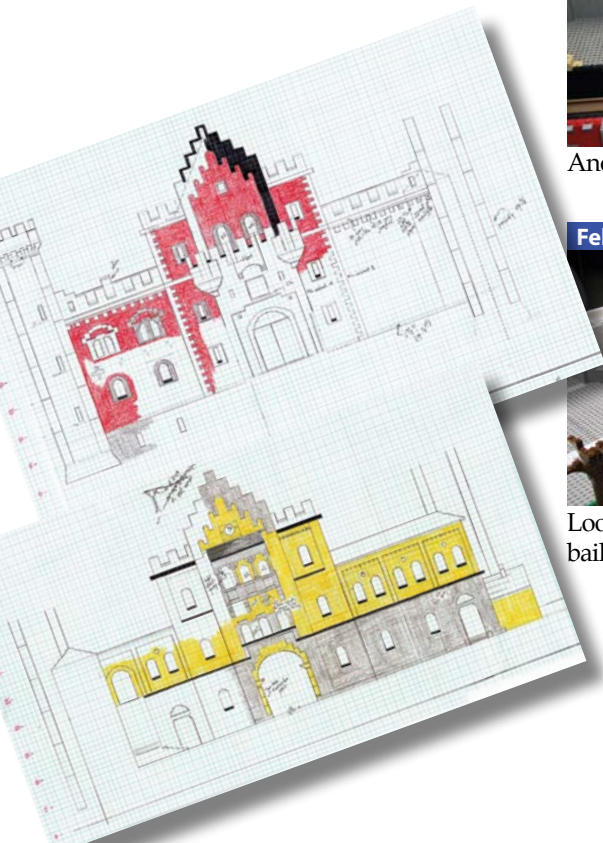
Building

Building a Castle: A Timeline

*Article and Photography
by Bob Carney*

In 2010, I built one of the most well-known castles in the world, Schloß Neuschwanstein. This is not my usual type of project as I tend to stay away from palaces and cannon forts. However, this proved to be a challenge that I couldn't resist.

Here, you can see the timeline of construction to this model. This will give you an idea of how a project of this scale is completed. I started on January 3, 2010 with the goal of presenting a completed castle at Brickworld 2010 in June. As I mentioned in my castle building article, I start with drawing elevations, which you can see below.



Setting up the layout and landscape.



Work begins on the entrance ramp.



The ramp nears completion.



The gatehouse is next to be built.



The other side of the gatehouse, with the lower courtyard.



The walkway from the gatehouse to the watchtower is taking shape.



Another look at the courtyard.



Landscaping resumes with the Palas end of the mountain.



Looking at the courtyard and lower bailey.



The gatehouse is complete.



March 7

The courtyard balcony is also completed.



March 18

The two-level passage from the watchtower to the Palas takes shape.



The basement of the Palas is complete.



Mountain detail is also done.



April 6

The main entrance to the Palas is completed.



April 20

The Kemenate is ready for a roof.



April 27

The Kemenate is complete.



Another view.



And another view.



All that's left here is decorative touches.



May 20

The front of the Palas. The decorations are stickers



The statue of St. George, on the wall of the grand staircase.



Construction begins on the Palas roof.




The East End is done, with the stair tower 99% done.



The North Side of the Palas.

The castle was completely assembled on June 3. From there, final decorating touches were done.

Neuschwanstein was then broken down and taken to Brickworld, where it was displayed from June 17 -20 in Wheeling Illinois. There, thousands of people saw the model up close.

I hope that this timeline showed you how I build and plan. You can build something as big with some planning, and more importantly some time and bricks! 

If you're viewing a Digital Edition of this publication, PLEASE READ THIS:

This is copyrighted material, **NOT** intended for downloading anywhere except our website. If you downloaded it from another website or torrent, go ahead and read it, and if you decide to keep it, **DO THE RIGHT THING** and buy a legal download, or a printed copy (which entitles you to the free Digital Edition) at our website or your local comic book shop. Otherwise, **DELETE IT FROM YOUR COMPUTER** and **DO NOT SHARE IT WITH FRIENDS OR POST IT ANYWHERE**. If you enjoy our publications enough to download them, please pay for them so we can keep producing ones like this. Our digital editions should **ONLY** be downloaded at

www.twomorrows.com





Windows

The lower levels of castles generally sport very narrow apertures, often called window slits, which serve the purpose of dimly lighting the room but being too narrow for enemies to pass. [Fig. 1] Over the past three decades, The LEGO Group has provided six categories of wall panels with a window which are suitable for castles:

Building

Building the Perfect Castle: Windows and Arrow Slits

*Article by Bob Carney
Art by Joe Meno*

To be a worthwhile defensive structure, a castle must have windows which provide some light but do not allow the entry of the unwanted or pugnacious. It must also provide protected defensive parapets for the often undermanned garrison to hold their fortification against aggressors. In these two regards, I give The LEGO Group grades of C- and F, respectively.



4444 Panel 2x5x6 Wall With Window (1984-2008) light gray, light bluish gray, dark gray & black (including several in various colors with stone patterns)



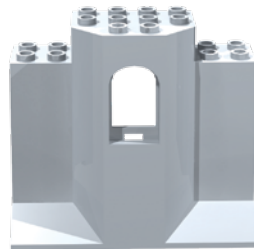
6055 Panel 6x6x6 With Window (1995-1997) black only



30100 Panel 3x6x6 Double Wall With Window (1997 only) dark gray



30246 Panel 3x4x6 With Window (2000-2012) light gray, light bluish gray, dark gray & black



48490 Panel 3x8x6 With Window (2004-2006) light gray & light bluish gray



60808 Panel 1x4x5 With Window (2009-2013) light bluish gray, dark gray, dark bluish gray & black (plus a stone pattern)

Only one is still made, and none are currently available at LEGO's Pick-a-Brick section. In addition none of the classic 3x3x6 corner panels, premiering in 1986, with or without bottom indentations, seen below, has ever featured a window (though stone patterns were available).



The LEGO Group began making bricks with bows (arch bricks) in 1971, but the 1x3 brick with bow, with the same shape as the top of the panel windows above, wasn't sold until 1984. With this element, a fairly narrow window of any height could easily be made. In 2010 a 1x2x2 castle window premiered in the same size as the panels above as well. However, there wasn't a reasonably flexible minifig anywhere who couldn't wiggle through all these windows, assuming he hadn't supersized his lunch. TLG grade so far: **D-**

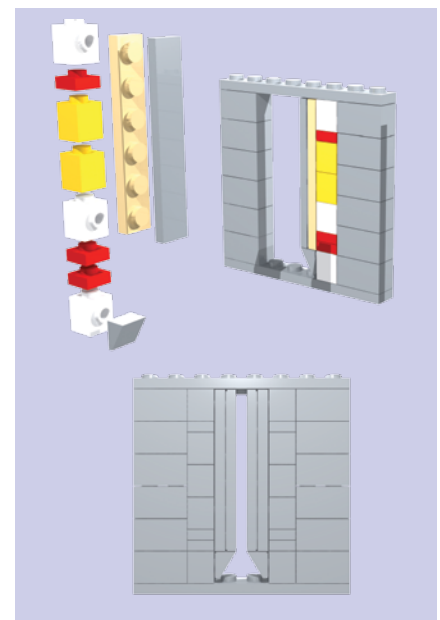
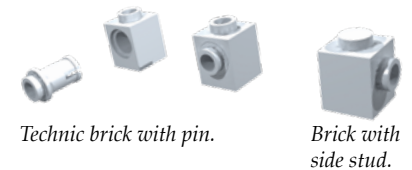
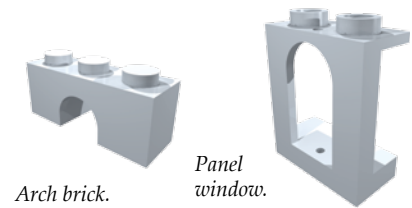
Then in 1996 LEGO Group revealed the Window 1x2x2 2/3 with rounded top (BrickLink term). The frame came with several window treatments including twisted bar, lattice and shutters. These windows were a wonderful addition for both novice and experienced castle builders, but weren't appropriate for the ground floor level. Final grade (to date): **C-**

The ability to create appropriately narrow windows has been possible since 1993, when the new 1x1 technic brick could be fitted with a 1/2 technic pin, and plate and tiles attached, but the process was greatly improved in 2009, when the modified brick with one stud appeared. No longer did a 1-stud thick slit window tend to flop back and forth, since the side stud didn't rotate.

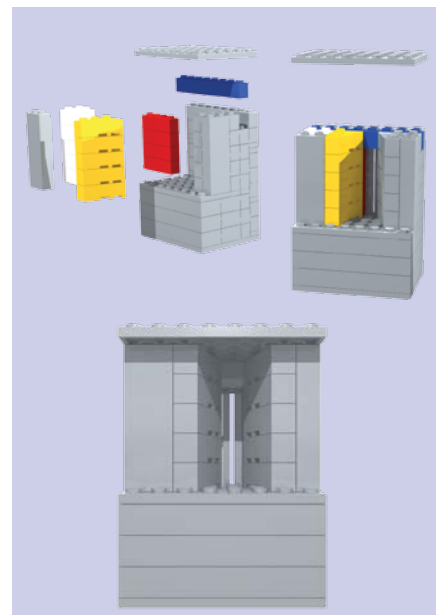
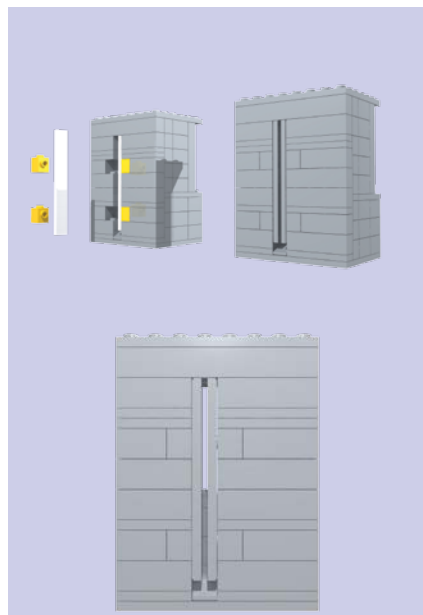
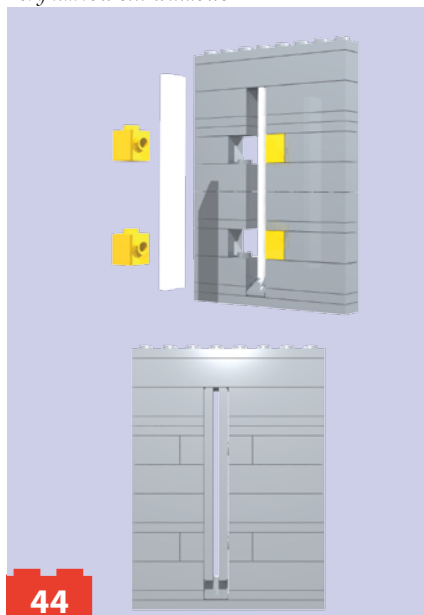
Slit windows can be any height, though multiples of two work best. They can be narrow (right) or very narrow (bottom left). These windows are excellent for cellars, or the dungeon if the Lord is especially generous to his enemies.

For the AFOL who likes to design the interiors of their castles, giving their minifig knights and their ladies a real rather than imagined domicile, either the narrow or very narrow slit window incorporates beautifully into classic castle cellars (seen on the next page).

The first floor of castle keeps and other buildings tend to be a little more liberal with windows that let in more light. This is the level that TLGs windows could come in very handy. Often the Great Hall or the keep's "entertaining room" is on this level—up just a modest ladder, one flight of stairs or a slightly exhilarating traipse across a small drawbridge. There are many examples of exuberant windows on the first floor, either because the Lord believed himself invincible or that the rocks or boiling oil or arrows from the parapets above would be sufficient protection from virtually every annoyance.



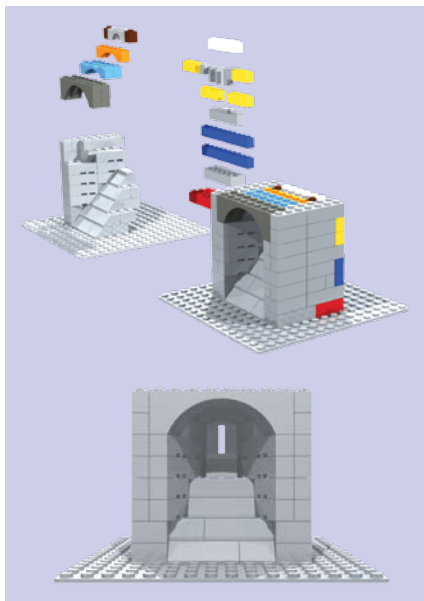
Very narrow slit windows.



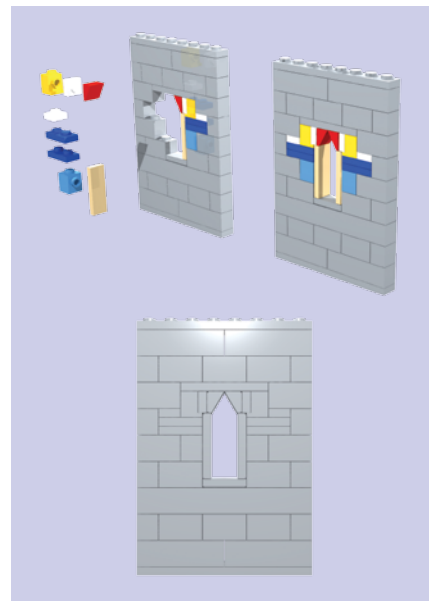
This article cannot begin to cover the myriad possibilities for constructing wonderful castle windows from LEGO elements, but several examples must be offered:

A smallish lancet window can now be easily created using a pair of 1x1 headlight bricks, 2 30° 1x1x 2/3 slopes, 2 1x3 tiles, along with a few older bricks and plates (seen at left) These can quickly be elongated by 2, 4 or 6 1-wide tiles into windows fit for a king (or anyone who aspires in that direction)!

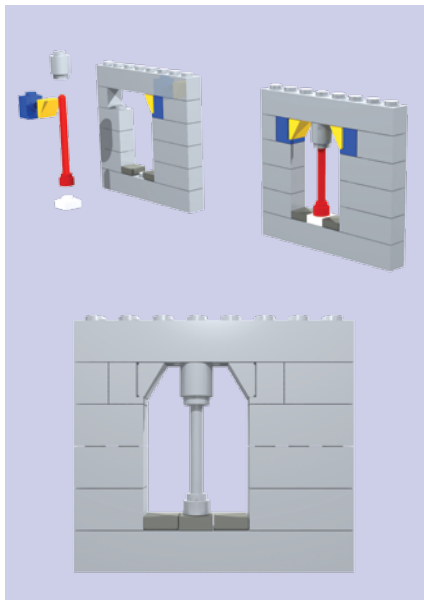
Other windows in early medieval castles tended to be smallish and often eccleseastical, but as time passed the windows on the higher (and thus safer) floors, and in the castles of the wealthier and more powerful, windows became larger and more decorative. Using small 30° slopes and tiles along with "headlight" bricks and others with studs on the sides, there is virtually no castle window you cannot create or recreate. Here are a few examples.



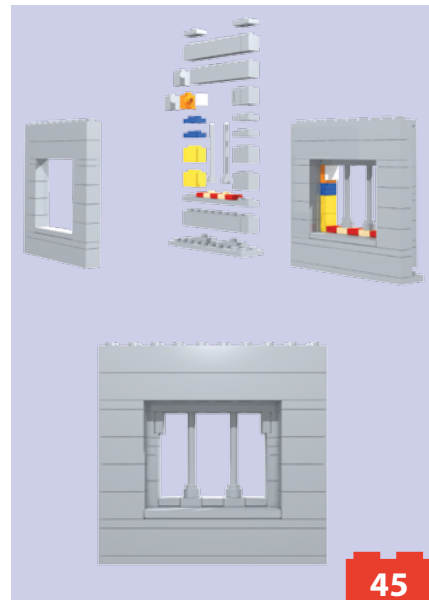
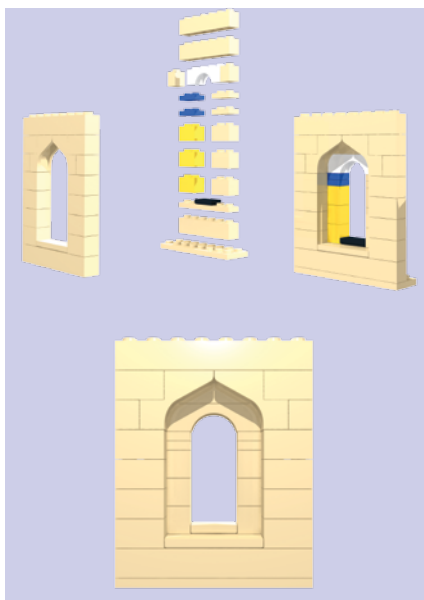
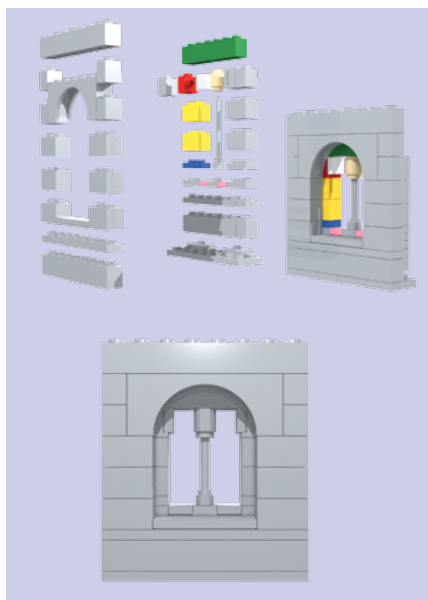
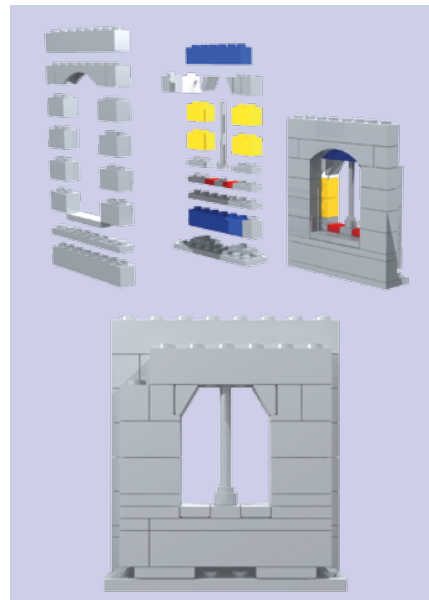
A slit window incorporated into a castle cellar.



A lancet window.



Other window designs.





Duplo parapet brick.



The modern Château de Roquetaillade.



Arrow slits.

Arrow Slits

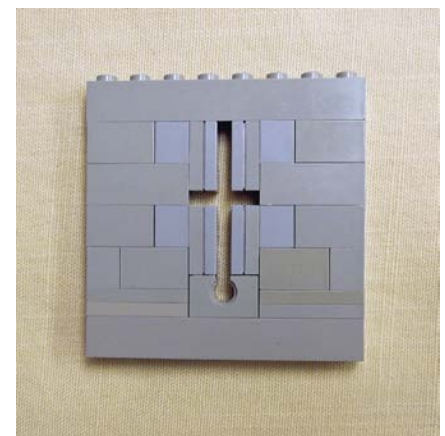
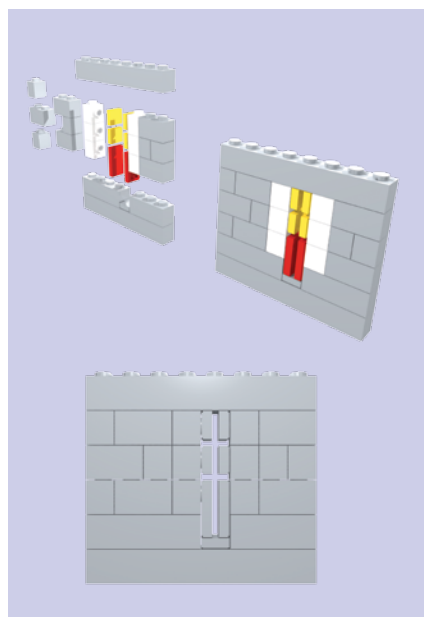
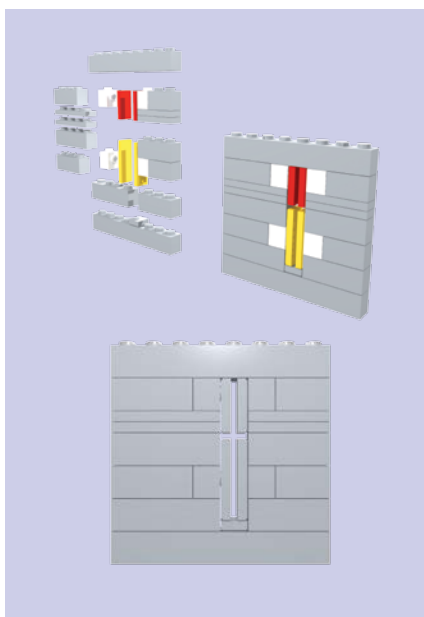
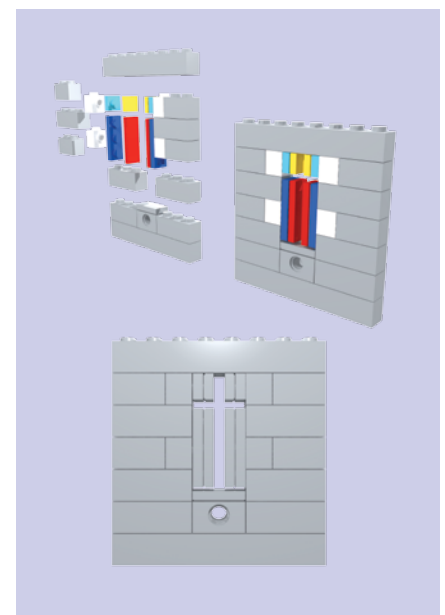
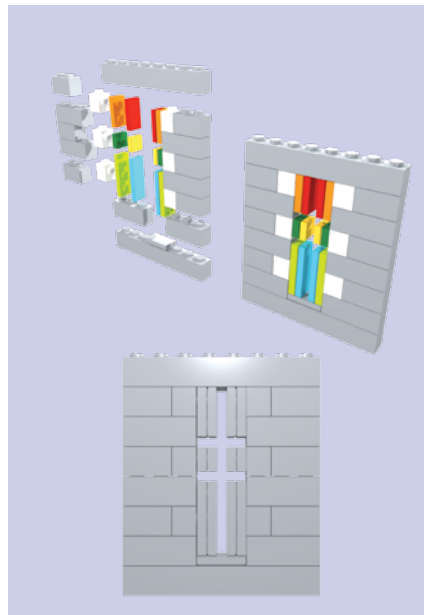
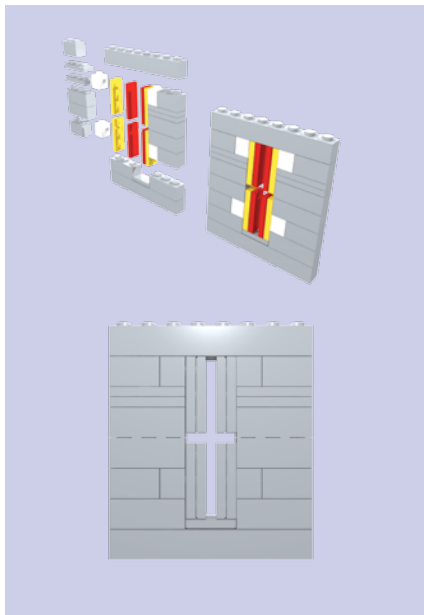
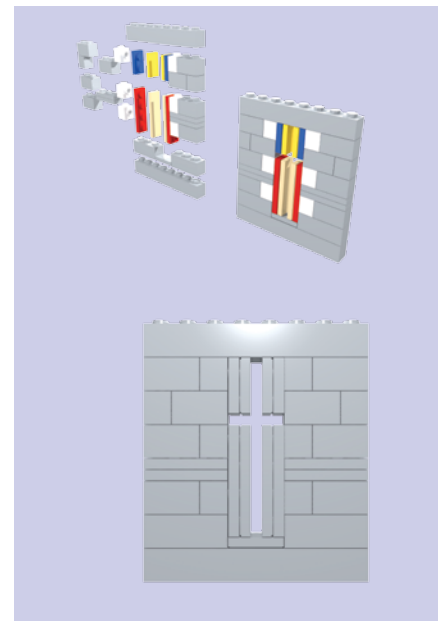
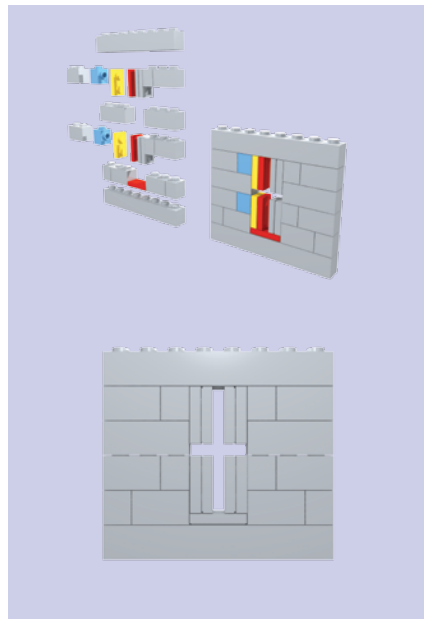
(a.k.a. embrasures, balistrarias, arrow loops, etc.)

It has been hard for me to believe that TLG has never created a brick with an arrow slit. The 1x2x2 brick which premiered in 1991 was a perfect candidate for that role. That brick accepted an axle. In 2009 TLG released a new line of 1x2x2 brick with a stud base—great with ‘jumpers’ (1x2 plate with one stud on top) but still no arrow slit. My brief exhilaration when the Duplo parapet brick (at top left) appeared proved to be for naught.

Classic Castle (www.classic-castle.com) has had imaginative arrow loops for a number of years, but the battlement is 3 studs thick, most appropriate for a cannon fort. What castle-loving AFOLs needed was arrow slits that would enhance any parapet, and castle towers, gatehouses, etc. For instance, the famous Château de Roquetaillade near Bordeaux (at left), now an elegant residence, didn’t originally look like that at all. Every place you see a window was originally an arrow slit. The sole window in the entire castle was high on the face of the donjon!

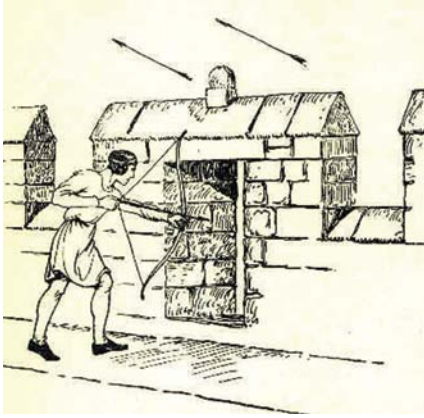
The answer turned out to be variations on the window slit described above. As anyone who has spent any time looking at castles well knows, the number of different kinds of arrow slits closely approximates the number of castles. Each architect/builder apparently thought he knew best when it came to how to aim an arrow, crossbow bolt or bullet at an approaching enemy. Several examples are shown to the left.

Here are several of many possibilities for arrow slits to enhance the walls of your next castle. The last figure requires defiling a 1x2 technic brick, but they seem to proliferate like bunnies in my technic bin!



This is the same build as the first window, except the technic brick was flattened and opened at the top.

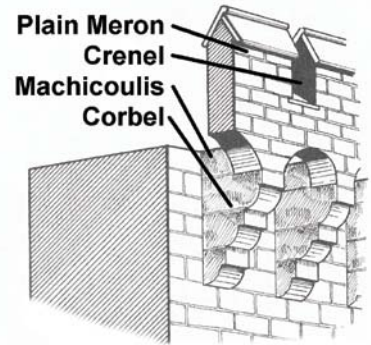
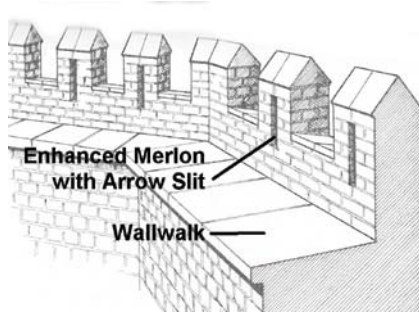
Arrow slits and merlons in use.



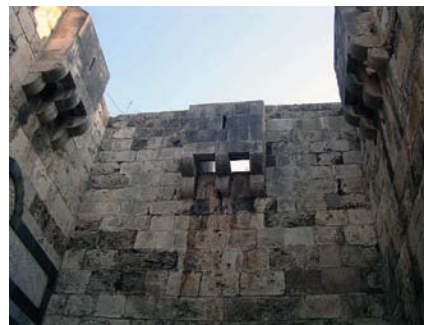
Embattled Parapets

Finally, we must consider the enhanced merlon and other features of our castles' battlements (left and left below), behind which our skimpy garrison must face the enemy. The drawings below provide a brief glossary of terms. Some tend to reserve the term 'embrasure' for the splayed "windows" and crenels through which cannon are fired.

The castles marketed by TLG over close to 30 years must be said to feature decorative battlements since they offer little protection for the minifig soldier. Such decorative parapets are featured atop many castellated houses of the last two centuries, especially in the UK. "Real castles" (my prejudice) may have merlons which are plain or embattled, atop an uninterrupted wall, or atop false or true machicolations.



Diagrams of castle fortifications.



Castle machicolations.



LEGO machicolations.

Here are several illustrative examples of embattled merlons on my recent castles: The first two photos show the simple arrow slits in four-stud wide merlons of Weobley Castle in Wales and the Castello di Rocca Scaligera in Italy respectively. Note the latter are two studs thick. The last photo shows five-stud wide merlons on the same Italian castle.



Weobley Castle in Wales. The arrow slits are crosses here.



Castello di Rocca Scaligera in Italy. The arrow slits are on the top.

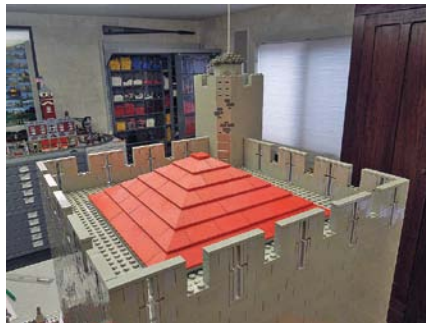


Another angle with different arrow slits on the top.

These photos demonstrate two slightly different cross arrow slits in the merlons of the Château de Roquetaillade in France.



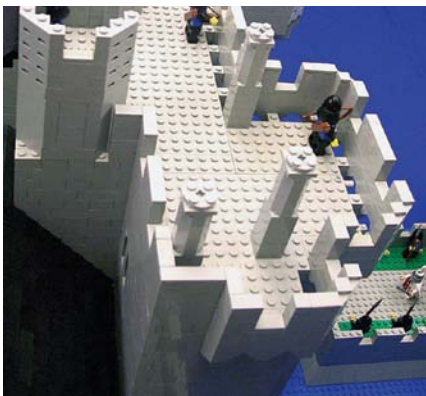
The cross arrow slits are seen on the top edge of the castle.



The photo below left shows typical Irish merlons atop the donjon at Aughnanure; the center the machicolated battlements of the gatehouse at Bodiam in Sussex, England; and finally at right, the square middle bailey at Château de Vincennes on the outskirts of Paris displays the covered, false machicolated parapets found on quite a number of castles on the European continent.



Irish merlons line the top of this castle.




Note the top battlements here.

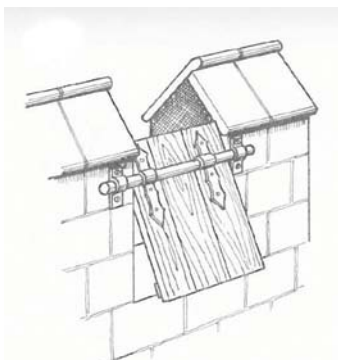


Château de Vincennes.

Castell Coch in Wales.

Further protection for the soldiers manning the battlements can be afforded with embrasure covers (seen below) of several sorts. These are nicely demonstrated on my model of Castell Coch in Wales (at right).

You should now be better equipped not only to protect, but enhance the fighting ability and longevity of the warrior minifigs you've grown to love. Leg godt, slottet arkitekt! 



Embrasure covers.



Phrean: A Medieval City

*Article and Photography
by Daniel Z*



I'm a 20-year-old engineering student living in Norway. I have been building with LEGO my whole life, and what might not surprise you is that medieval cities and castles have always been my favorite things to build. When I was younger I was always a little scared of reaching the maximum age on the LEGO boxes, because I couldn't imagine losing interest in LEGO. Fortunately I didn't lose interest and kept building, though less frequently than before. Then I discovered the online AFOL community and I got seriously infected with the LEGO virus. Over the next couple of years I built over fifty medium and large sized MOCs, took part in many contests and attended several lego conventions and shows.

Lately I haven't built as much as I used to, but I have started planning my next MOC, which I'll hopefully build this fall.

The Medieval City of Phrean

I built this MOC to bring to LEGO Fanwelt 2010 in Germany where it was part of a large castle-themed layout by the Dutch LowLUG. I knew there were going to be many amazing and huge creations at Fanwelt, so in order to make my MOC noticeable at all it had to be big. It was and still is the biggest landscape and building I have built, with the tallest spire reaching a height of more than a metre (3 ft) and a footprint of 1.5 square meters.

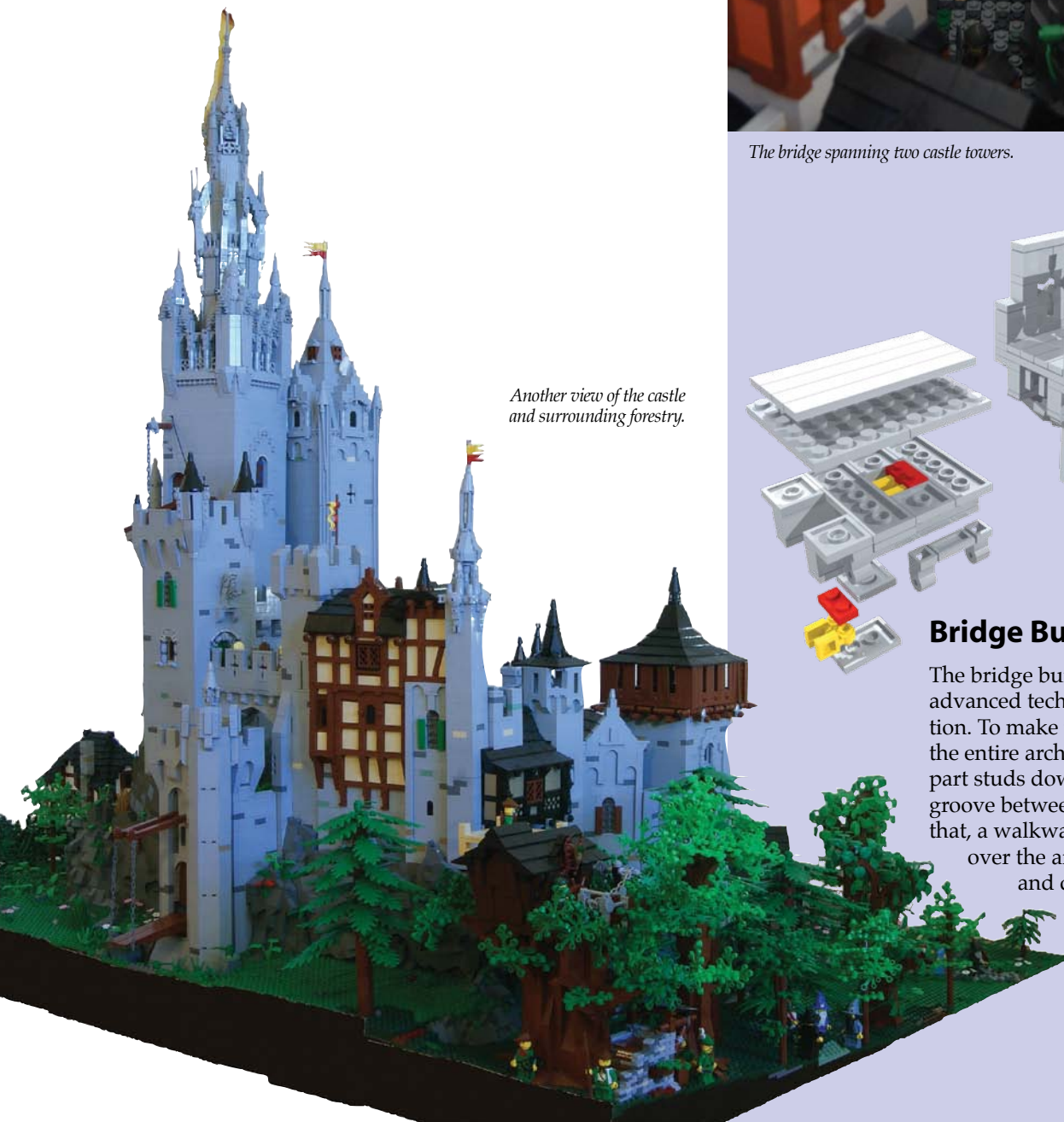
It took me a few months of off and on building to complete and I would guess I used more or less 20,000 pieces to build it.



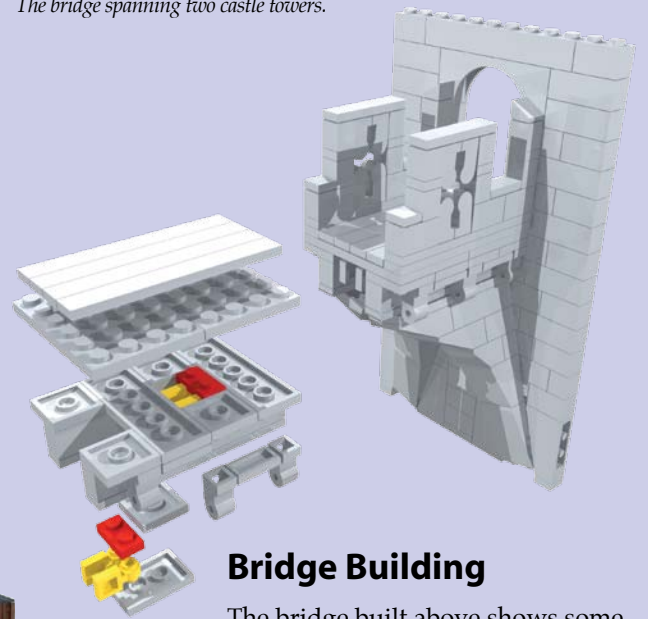
Top view showing the layout of Phrean.



The bridge spanning two castle towers.



Another view of the castle and surrounding forestry.



Bridge Building

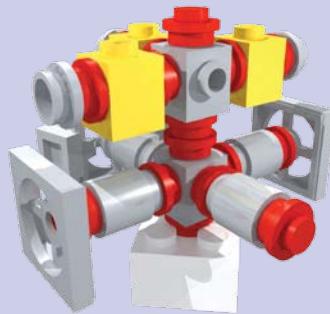
The bridge built above shows some advanced techniques in its construction. To make the lower arch slope, the entire arch is built as a separate part studs down and is placed in a groove between sloped bricks. After that, a walkway is built to be placed over the arch that has studs up and down. Finally, the walls are built, using minifigure legs to make the decorative patterns.

The Main Spire Deconstructed

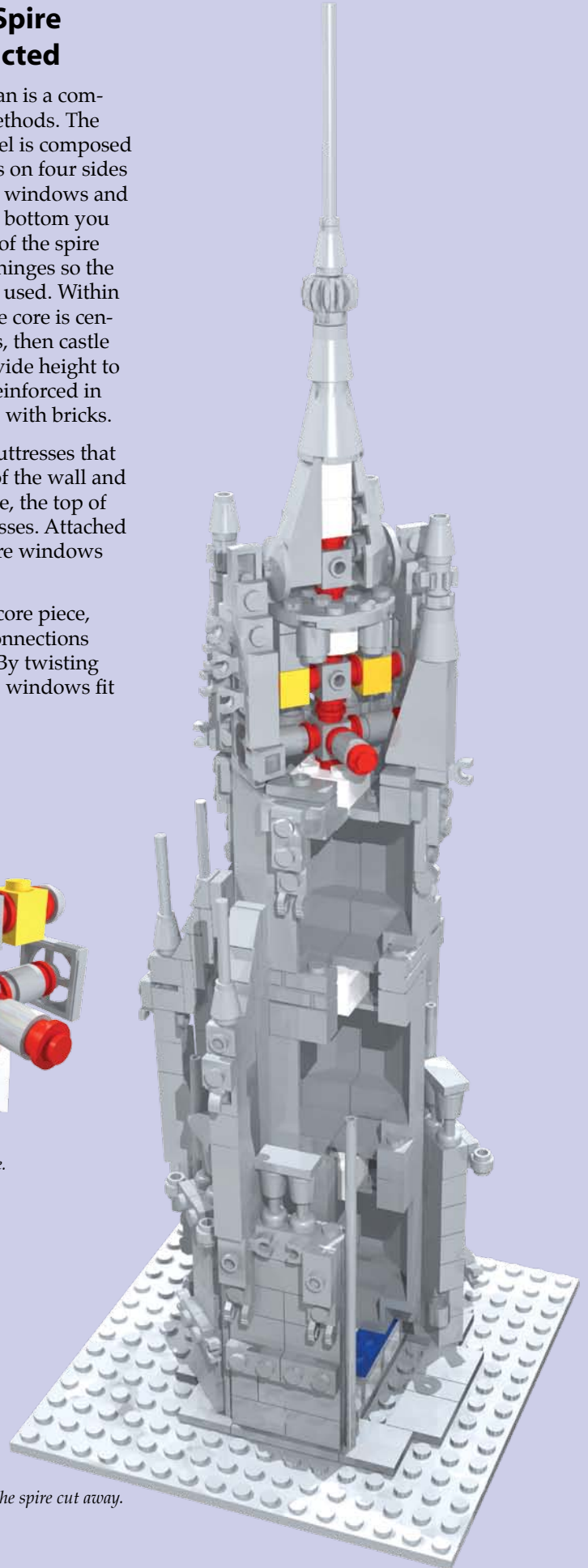
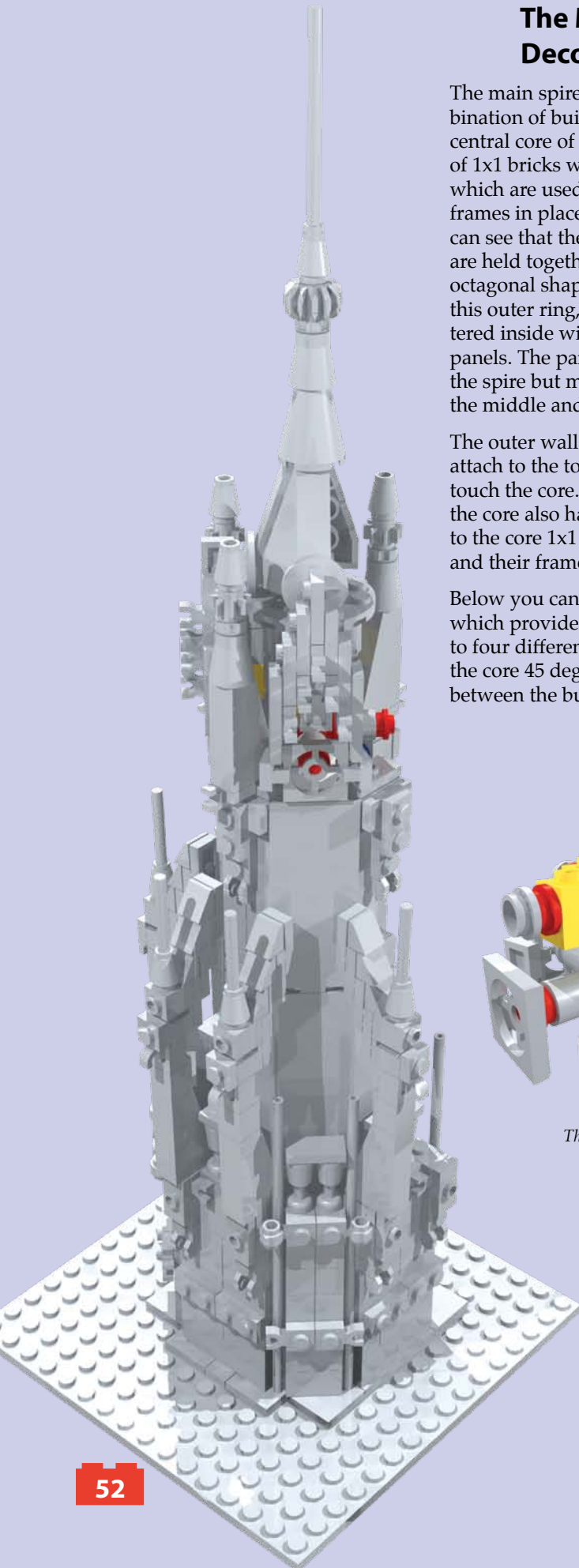
The main spire of Phrean is a combination of building methods. The central core of the model is composed of 1x1 bricks with studs on four sides which are used to keep windows and frames in place. On the bottom you can see that the panels of the spire are held together with hinges so the octagonal shape can be used. Within this outer ring, the spire core is centered inside with bricks, then castle panels. The panels provide height to the spire but must be reinforced in the middle and corners with bricks.

The outer walls have buttresses that attach to the top edge of the wall and touch the core. Likewise, the top of the core also has buttresses. Attached to the core 1x1 bricks are windows and their frames.

Below you can see the core piece, which provides stud connections to four different sides. By twisting the core 45 degrees, the windows fit between the buttresses.



The spire core.



The spire cut away.

Irruini Manor

This was the first MOC I built after a break of more than a year in which I didn't build anything new. I wanted to build something relatively small but detailed, and I always like building on rocks, so I decided to build a tall manor on a rock. I was inspired by Luke Watkinson's (Derfel Cadarn) walls made out of 1x1 round plates to make more detailed and rough looking walls, and for this I used 1x1 (square) plates and 2x2 round plates. In a row of 1x1 plates each plate can be twisted slightly so that the row is not flat but rough looking, after which the next layer can be twisted in the opposite direction. In my walls the third layer would then be made of 2x2 round plates on top of which I placed two new layers of 1x1 plates and so on. These walls also bend very easily and can be used to make curved walls that look the same and fit in well with the straight walls. This is of course a very time and parts intensive technique, and I wouldn't use it for anything larger than this MOC, but it helps to make small building look more complex and realistic.



Different angles of the manor, showing many details, including stonework, wall detailing and roofing.





An overview of the model, with a polar bear guard.

The Walls of Arkusa

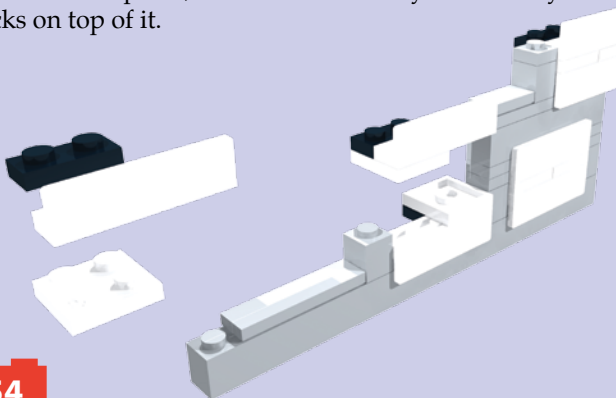
This MOC was part of a secret collaborative MOC release organized by siercon&coral (Sean and Steph Mayo). The 11 participants all made MOCs depicting an anthro-polar bear race and telling their history. The project was called the Flash-MOC Blitz-zard and we all released our MOC at the same time on flickr, flooding everyone's contact streams with polar MOCs. We decided on some typical architectural styles for the buildings, one of which was walls made of huge stones. To give the walls more depth I came up with a technique using panels to make stones that protrude a little from the rest of the wall, corners included. It is a very parts-intensive technique, but the parts used are inexpensive and look great.



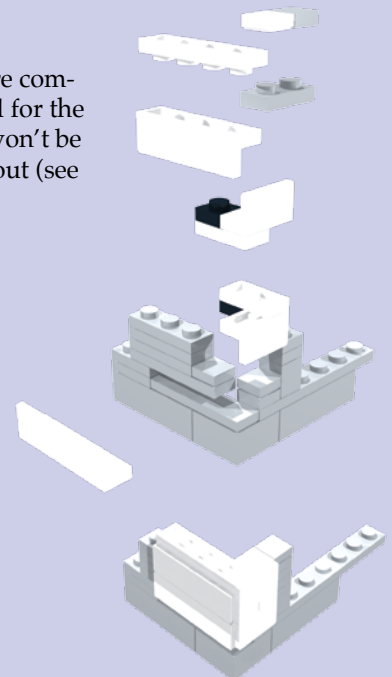
A look at some of the details of the wall.

Wall Building

Each 1x4x1 panel is attached to a 2x2 plate which in turn has a 1x2 plate attached to it. The space between the studs of the 1x2 plate and the thin part of the panel is exactly one stud, so the panel can be attached firmly upside-down to the brick underneath it. The next panel is then placed on top of the first panel, and later secured by the next layer of bricks on top of it.



A similar but a little more complex method can be used for the corners, although they won't be as stable and might fall out (see the diagram).





Helm's Deep photographed to match its movie counterpart's lighting and effects.

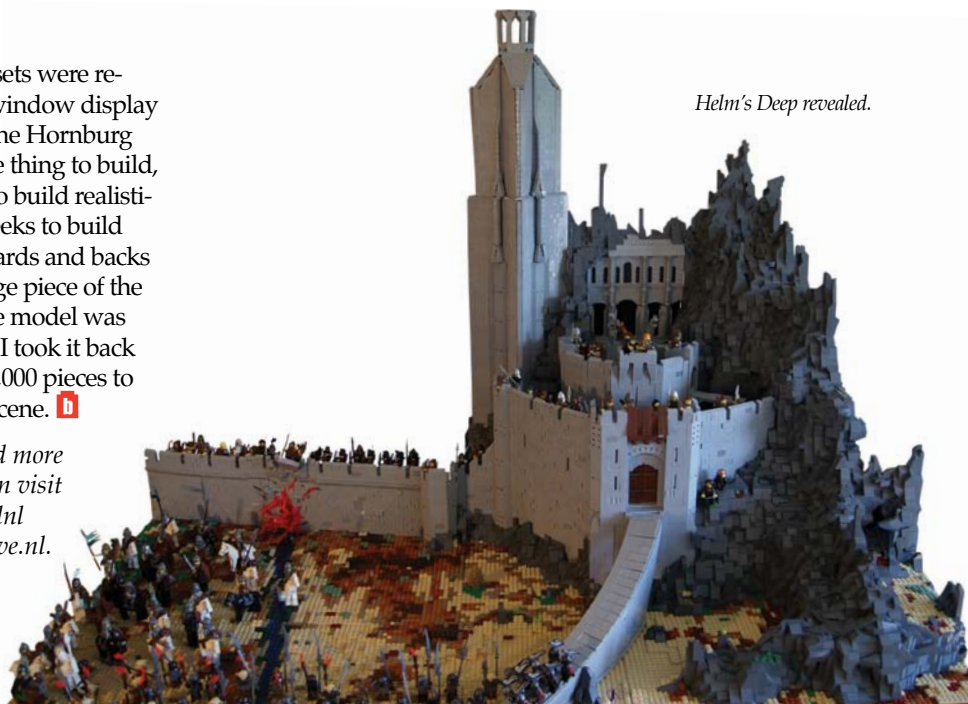
Helm's Deep

A few weeks before the LEGO *Lord of the Rings* sets were re-released I was hired by a store in Oslo to build a window display for them to promote the new theme. I thought the Hornburg in Helm's Deep would be the most recognizable thing to build, other than Minas Tirith (which would be hard to build realistically on a small scale). I only had a couple of weeks to build the model, so I was not able to finish the courtyards and backs of the walls, but I was at least able to build a large piece of the mountain and a proportionally-sized tower. The model was on display in Oslo for almost six months before I took it back home and dismantled it. I think I used about 15,000 pieces to build it and over 100 minifigures for the battle scene. 🇳🇱

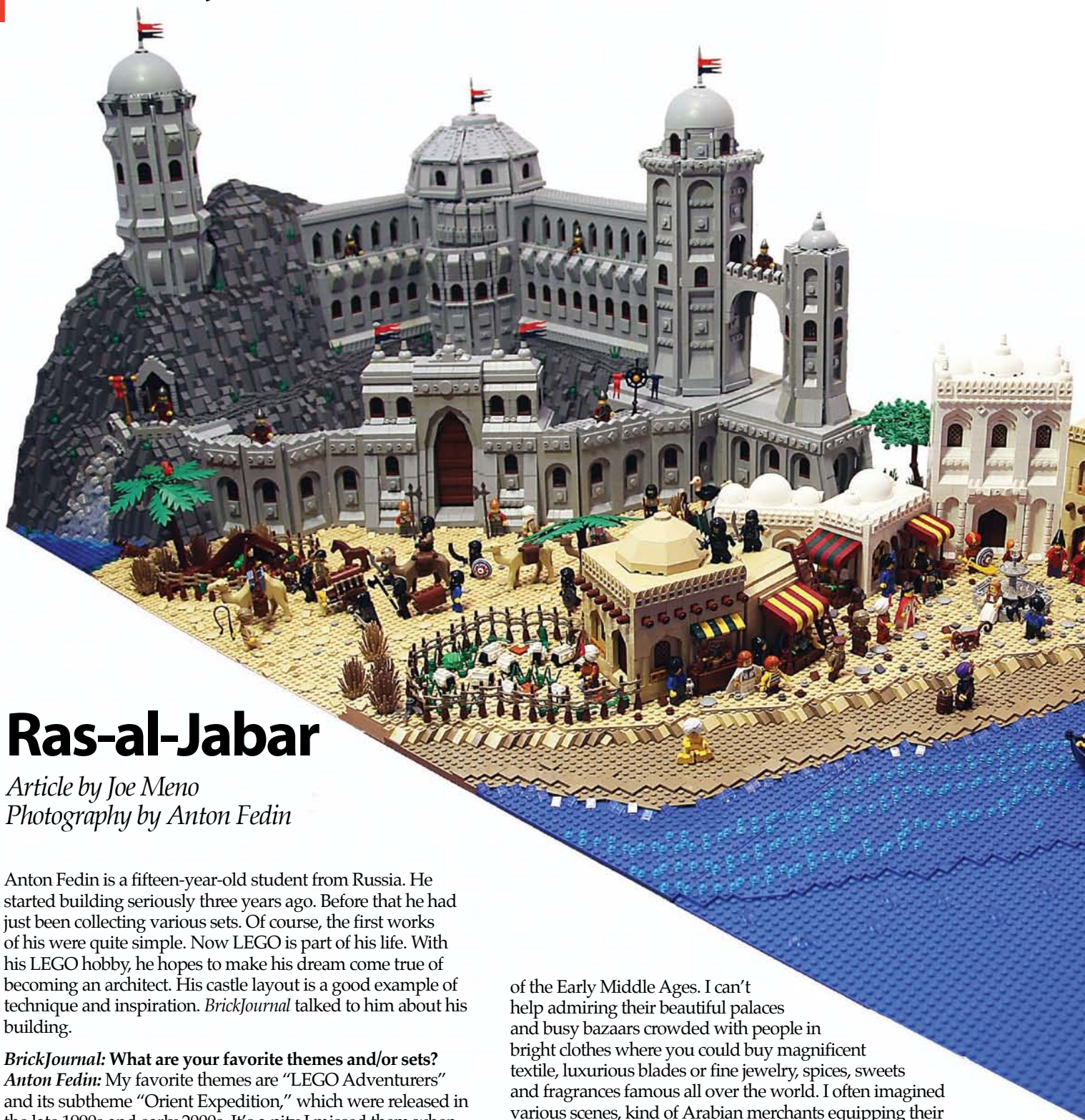
Helm's Deep revealed.



For questions, commissions and more pictures of my creations you can visit <http://www.flickr.com/danielzdnl> or send an e-mail to danielz@live.nl.



Community



Ras-al-Jabar

Article by Joe Meno

Photography by Anton Fedin

Anton Fedin is a fifteen-year-old student from Russia. He started building seriously three years ago. Before that he had just been collecting various sets. Of course, the first works of his were quite simple. Now LEGO is part of his life. With his LEGO hobby, he hopes to make his dream come true of becoming an architect. His castle layout is a good example of technique and inspiration. *BrickJournal* talked to him about his building.

BrickJournal: What are your favorite themes and/or sets?

Anton Fedin: My favorite themes are "LEGO Adventurers" and its subtheme "Orient Expedition," which were released in the late 1990s and early 2000s. It's a pity I missed them when they were first released, but eventually I was lucky enough to get them all. What I really like is "Scorpion Palace" (#7418). Had it not been for it I wouldn't have been able to build my Ras-al-Jabar. It was sort of a catalyst for the idea of this diorama.

What inspired you to build Ras-al-Jabar?

I was inspired by the architecture of Middle East and India

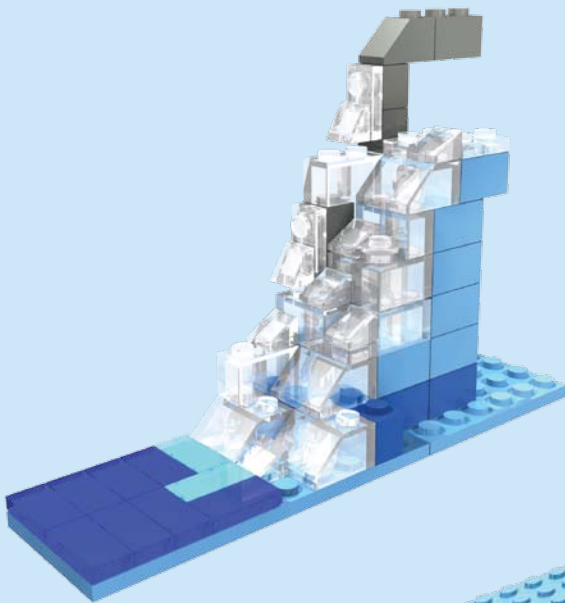
of the Early Middle Ages. I can't help admiring their beautiful palaces and busy bazaars crowded with people in bright clothes where you could buy magnificent textile, luxurious blades or fine jewelry, spices, sweets and fragrances famous all over the world. I often imagined various scenes, kind of Arabian merchants equipping their caravans or fleet. It was during one such moment when I was enjoying this charming and mysterious Middle Eastern beauty, that it occurred to me to build my fantasy in the next diorama. I wonder why such an interesting theme is not very popular with LEGO fans. Besides, by that time I had collected a considerable pile of various items which seemed to be compatible such as domes, camels, turbans, yataghans, etc. and I was looking forward to using them.



Making Water Fall

Here, Anton built a waterfall that streams out from the mountain. Most of the building is made of transparent slope elements to depict cascading water. What makes this different is that Anton uses color bricks underneath the transparent to add another level of detail. You can see how this works in the lower left slice of mountain.

Other details here include attaching 1x2 plates on the bottom of the waterfall arch to add the 1x1 clips and use of the 1x2/3 cheese slopes on the tops of the walls. For the water, transparent light blue and transparent blue tiles are placed on top of medium blue plates to give an illusion of depth.



What were the toughest things you had to build?

There are two parts in my diorama: the castle and the coastal village. It took me a month and a half to build the former, while the latter—just about a fortnight. The castle was a real challenge. Before starting it, I had designed several concepts but as I liked none of them, I had to improvise. Since the castle was based on a mountain, the mountain became very important and complicated, as well as the most costly part of my composition. I was eager to make it as realistic as possible, so I used more than 1500 bricks on it. It was also very important to make the castle and the mountain look like an ensemble, because it was inside the mountain where the main part of the castle was planned to be.

There was another difficulty besides the mountain: the towers. I wanted to design four various types and the tricky part was to make them stable. If my work had been meant for a photo session I wouldn't have taken the trouble to stabilize them, but as I was building it for an event, I had to make it durable, so that it would last for a while.

What are you happiest with?

It is difficult to say what exactly I am happiest with, because I like each part of this diorama in its own way. But, perhaps, my favorite parts are the village and the bazaar. After rather long, hard and monotonous work at the castle I was happy to relax while making these two. What was important for me is to reproduce the atmosphere of the Middle East, so I was not only very particular about the architectural style, but also paid much attention to minor details and scenes. My favorite ones are the awning roofs, the sheep enclosure, the man meditating on a beach, the two assassins chasing each other, the group of janissaries, the rich girl sitting on a small fountain in the center of the square. In my opinion it's these details that give the diorama its unique spirit. I also like the tooth plates on the roof line and a part of the balloon ("Aero Nomad" 7415) as a Arabic dome, which I used for the bazaar buildings. 🇺🇦



A detail shot of a tower. Here, walls are again hinged, this time to wrap completely around. Walls are repeated as needed.

Overall view of the outside castle wall.

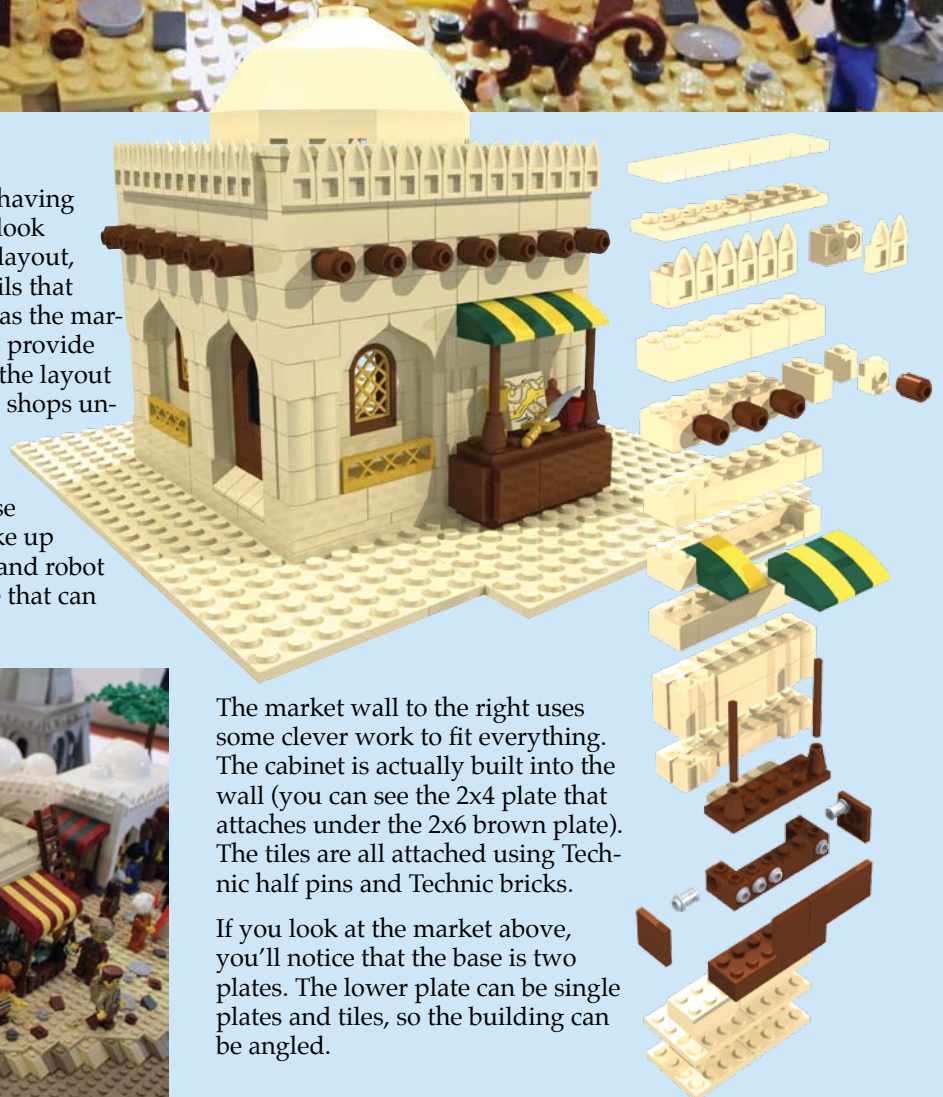




Making Markets

Building a bustling market takes more than having buildings placed. The details make the area look busy. Anton has minifigures populating the layout, doing things. There's also a lot of small details that demand a viewer to take a closer look, such as the market display as seen at the right. The awnings provide a color accent to the general tan and grey of the layout and provide points of interest, and the small shops underneath allow another opportunity to add life to the scene.

Below, there is another detail: fencing. A close look at the fence reveals that three parts make up the entire fence: 1x1 cone, light saber blade, and robot arms. Just these parts create a winding fence that can flex to a space.



The market wall to the right uses some clever work to fit everything. The cabinet is actually built into the wall (you can see the 2x4 plate that attaches under the 2x6 brown plate). The tiles are all attached using Technic half pins and Technic bricks.

If you look at the market above, you'll notice that the base is two plates. The lower plate can be single plates and tiles, so the building can be angled.



An overall look at the layout.

Stéphane Dely

I'm 33 years old, an IT consultant and the father of two children. I started playing with LEGO bricks when I was very young, about 4 or 5 years old. As far as I can remember, I've been around bricks since they have been present in the family for a long time. My godfather and my parents—especially my mother—have always been fascinated by the creative mind that comes with the use of bricks. As a result, I had a lot of sets: City, Classic Space, Technic, and so on... But it was when I got my first castle at age of 7—the legendary 6080—my passion for the Middle Ages and therefore the Castle theme began. At the time, all I did was build the sets I had. At the age of 10, I started to use the bricks to design and create new things: I did not know it yet, but I was starting to build MOCs.

I continued this phase until I was 16, when my Dark Age arrived. With girls, friends, and outings there was no time in my life for the bricks. Years later, in December 2007, while I was taking a walk with my then-girlfriend in Cologne, I discovered a LEGO Store. *What? The brand of my childhood has its own stores?* Intrigued, I went inside and was fascinated by what I found there. My wife gave me a Knight's Kingdom II chess set for Christmas—and that was all.

That was all the building I did until the day I visited a toy store and came across the *Star Wars* sets. This was the turning point: I plunged completely back into building. I also discovered, after some research, a community on the Internet. There I could share my experiences with others who had the same 'addiction' I do.

The official LEGO website also allowed me to discover that the theme that I loved so much when I was little still existed: the Castle theme. I joined BrickPirate's French community forum (LEGO Pirate at the time), eventually discovering the work of talented international builders such as the incredible Cadarn Derfel, who inspired me to start building again.

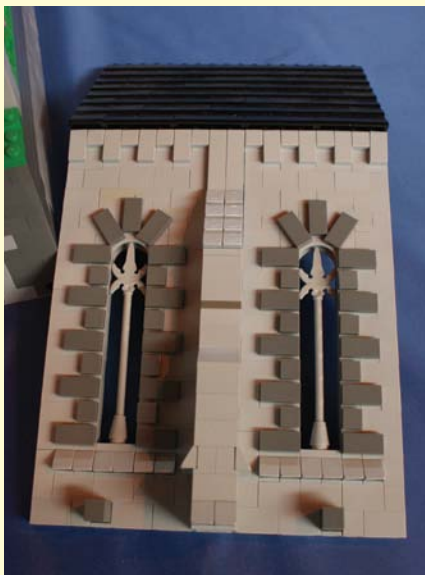
This is where I got the crazy(?) or ambitious idea to create an imaginary medieval city: Archenal. Before starting Archenal, I researched a lot on the time period from the eleventh to the fourteenth century. I did not want a church, so I built a Templar chapel as found in the Commandery of Coulsdon near Paris. I wanted an imposing West Gate: part of the inspiration of Riquewihr in Alsace. As for the rest of the layout, everything is imaginary.

Building Archenal

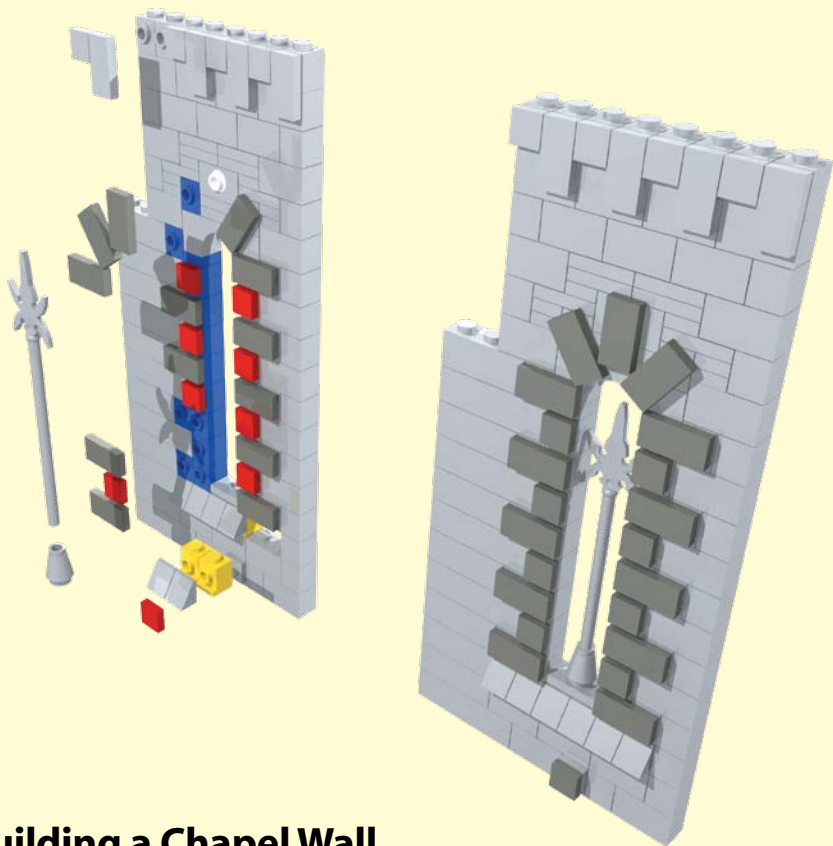
Article by Stéphane Dely and Nicolas Picot

Photography provided by Stéphane Dely and Joe Meno

One of the displays at Fana'briques 2012, a French LEGO fan event, was a castle layout named Archenal. Built by two LEGO fans, this layout is a great example of castle building. BrickJournal talked to the builders to get their story and a little about Archenal.



The path leading to the chapel door is alive with street vendors.



Building a Chapel Wall

Dely's Templar Chapel (seen at the edge of the top left photo and above left) required building arched windows that reflected the building styles of that period. As seen in the diagram above, the window uses 1x1 bricks with studs on the side to attach tiles to. Alternating between 1x1 and 1x2 tiles makes a nice brick pattern for the window edges. For the top tiles, the bricks were shifted to allow angled positioning. The very top tile is held in place with a 1x2 Technic brick with a half-stud pin.

The bars in the window are from a spear inserted into a 1x1 cone, then placed on a 1x2 jumper plate. The result is a window befitting a chapel.




Inside the chapel.

What makes the city unique is that each 48 stud x 48 stud module can be presented independently. The modules led me to detail each as if they were a full-fledged MOC.

This city is designed for display, and at Fana'briques 2012 convention, I was very proud that my friend Nicolas Picot joined me to make the city even larger. More has been added to the project in 2013, with two other builders creating a city more than 2 meters long and almost 1 meter wide!



A look at the castle tower and some detail work, including stonework done with plates.

After Fana'briques the Archenal project will be on hiatus, as I will be focusing on new projects, such as my Heroic fantasy, which can be seen on my Flickr gallery. 

Galleries (QR codes for each link are at the bottom):

Flickr: www.flickr.com/photos/stephle59

Archenal 2012 WIP :

<https://picasaweb.google.com/115177107368902319167/LEGOArchenal2012>

Archenal 2011 WIP :

<https://picasaweb.google.com/115177107368902319167/LEGOArchenal2011>

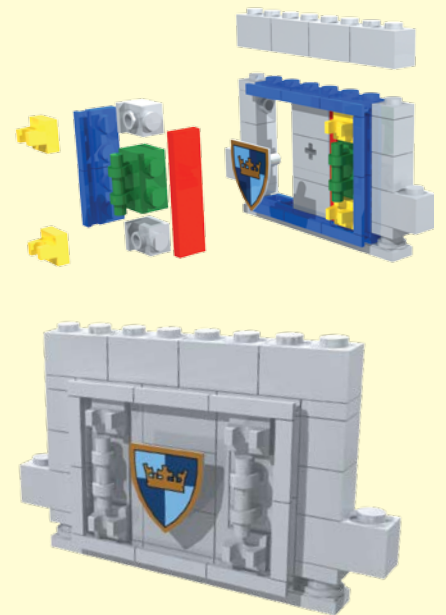
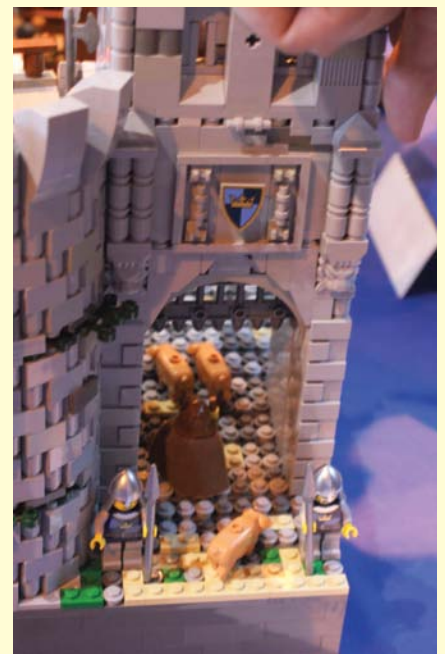
Flickr



Archenal 2012

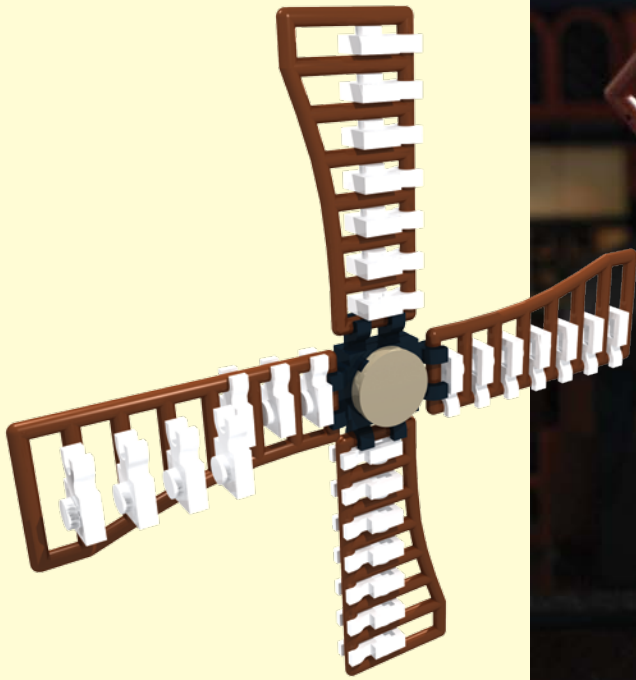


Archenal 2011



Framing a Shield

Dely's medieval city has an entrance crest that is framed by masonry. This effect was done by using 1x2 plates with door rails to make a raised border (they are blue in the upper diagram). Since one brick and two plates stacked are the same length as two studs, the side panels are built to fit and attached to the wall with a 1x1 brick with side stud. The shield is inserted into a 1x2 Technic brick with axle hole.



Windmill Detail

Picot's windmill is a good example of what a repeated part can do. By adding a 1x1 plate with vertical clip inside each windmill blade, they become fuller-looking and more realistic.

A closeup of the windmill.



Nicolas Picot

I'm 38 years old, an optician, married and father of two adorable little girls ages 3 and 8 years old.

As far as I remember, I have always had LEGO, mainly castles. I also have good memories of Forestmen. Already by that time, I preferred to create rather than play and while I do not remember a particular set, I do remember a 3-multicolored mast ship, my medieval port village and castle that occupied my room besides a fire-breathing dragon that earned me first place in a local competition. At that time I also desired to work for The LEGO Company, but I knew no foreign language (and still don't) and without the Internet community to share my passion, I sank into the Dark Ages.



A surprise lies under the farmland.





All of the buildings have full interiors and had opening panels to show hidden details.

Galleries

(QR codes are below the web links):

<http://www.flickr.com/photos/icare-LEGO-fan/>




<http://www.mocpages.com/home.php/47950>



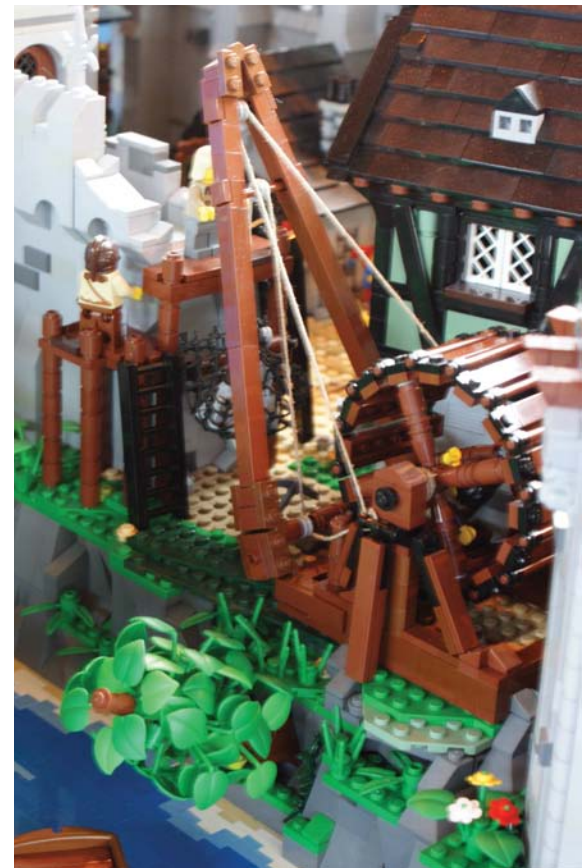
It was only when my mum took out my old bricks for my daughter and my nephew that I caught the building bug again. I quickly acquired boxes of the Fantasy Era with which I began to build MOC castles and dwarfpunk (an expression borrowed from Darkspawn, another Flickr builder).

Later, I discovered the French community through Brickpirate forum (www.brickpirate.net) and its famous L13 (a monthly contest) which allowed me to try other styles such as architecture (L13 I Am An Architect).

2012 was my first time at an exhibition (Fana'briques). My friend stephle59 invited me to work on his Archenvall project and I wanted to return to my first love.

My approach is different from his own. Because my work was not meant to remain after the expo, I decided on building an extension so as not to impose constraints on the development of the city itself. I had to decide between building a farm and a monastery but saw Archenvall already had a Templar chapel, so I opted for the fortified farm. 

A crane moves stone for construction.

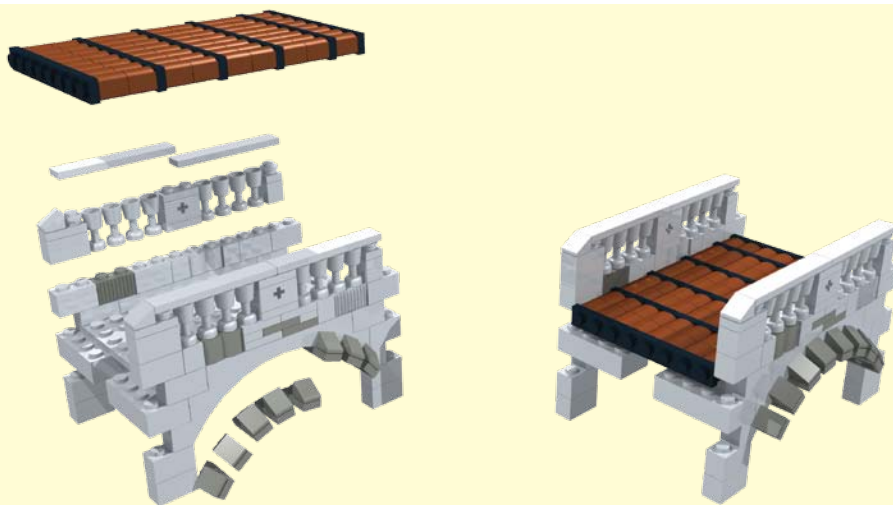




A sentry keeps watch.



Another angle of the castle with tower under construction.



Bridge Building

Dely's castle includes a bridge (left) that uses several techniques for detail. Using the diagram above, the road is actually a wall of log bricks that is simply dropped on top of the middle plates. The railings are built using minifigure goblets, 1x2 bricks with grilles, and 1x2 log bricks. The arch bricks are 1x2 plates with cheese slopes that are attached to the bottom of the arch.



Trojan Rabbit




Design
and Instructions
by Tommy Williamson

Tommy Williamson is no stranger to *BrickJournal*, having been featured previously for his Jack Sparrow miniland scale figure. Since then, he has gone farther into building, making some remarkable *Star Trek* props and other models. He's now doing a new column for *BrickJournal*: DIY Fan Art. Here, Tommy takes a little time out from his busy schedule to make a model of his choosing for the magazine.

What is he busy on? Tommy's now a LEGO community blogger with his own website: BrickNerd (www.bricknerd.com). As he says, "I've been a fan of LEGO all my life, and got into the AFOL scene about 8 years ago. I decided it was time to take my unhealthy obsession to the next unhealthy level and start a fan site. Not only do I cover great MOCs and LEGO news, I host a bi-weekly web series. I also do reviews and feature artist bios and interviews. If you're nerdy about the bricks, BrickNerd is for you!"

About the Trojan Rabbit:

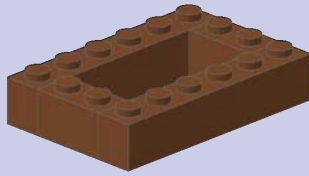
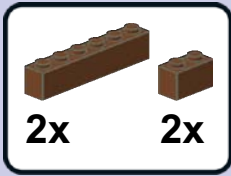
"When Joe Meno contacted me to design a model for the castle issue I didn't have to think very long before the idea for this little creation popped in my head. See, the plan is simple: Lancelot, Galahad, and I will wait until nightfall, then pop out of the rabbit. Catching them totally off guard. Not only off guard, but totally unarmed! When I think castle, I automatically think *Monty Python and the Holy Grail*. Thus I give you, the Trojan Rabbit! I hope you have a decent selection of brown bricks because this one's a little monochrome. The only somewhat rare bricks are the wedge plates in the ears. Other than those, it's all common brick." 

Parts List (Parts can be ordered through Bricklink.com by searching by part number and color)

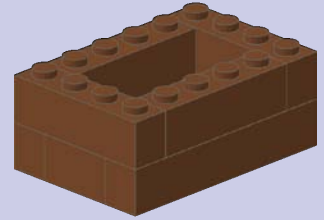
Qty	Part	Color	Description
2	47905.dat	Reddish Brown	Brick 1 x 1 with Studs on Two Opposite Sides
5	3004.dat	Reddish Brown	Brick 1 x 2
1	3622.dat	Reddish Brown	Brick 1 x 3
4	3010.dat	Reddish Brown	Brick 1 x 4
4	3009.dat	Reddish Brown	Brick 1 x 6
1	3937.dat	Dark Red	Hinge 1 x 2 Base
1	6134.dat	Black	Hinge 2 x 2 Top
7	3023.dat	Reddish Brown	Plate 1 x 2
3	3794a.dat	Reddish Brown	Plate 1 x 2 without Groove with 1 Centre Stud
1	3623.dat	Reddish Brown	Plate 1 x 3
4	4032a.dat	Reddish Brown	Plate 2 x 2 Round with Axlehole Type 1
4	2817.dat	Black	Plate 2 x 2 with Holes

Qty	Part	Color	Description
1	3021.dat	Reddish Brown	Plate 2 x 3
1	3020.dat	Reddish Brown	Plate 2 x 4
8	50746.dat	Reddish Brown	Slope Brick 31 1 x 1 x 2/3
5	3040b.dat	Reddish Brown	Slope Brick 45 2 x 1
1	3665.dat	Reddish Brown	Slope Brick 45 2 x 1 Inverted
2	3037.dat	Reddish Brown	Slope Brick 45 2 x 4
2	32073.dat	Black	Technic Axle 5
2	98138.dat	Light Gray	Tile 1 x 1 Round with Groove
1	43723.dat	Reddish Brown	Wing 2 x 3 Left
1	43722.dat	Reddish Brown	Wing 2 x 3 Right
1	41770.dat	Reddish Brown	Wing 2 x 4 Left
1	41769.dat	Reddish Brown	Wing 2 x 4 Right

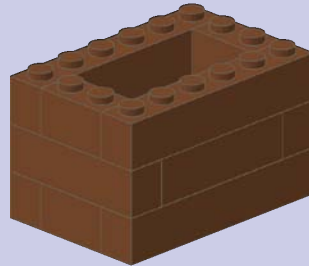
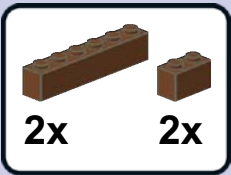
1



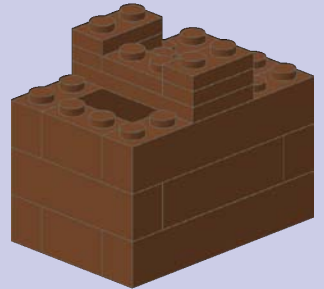
2



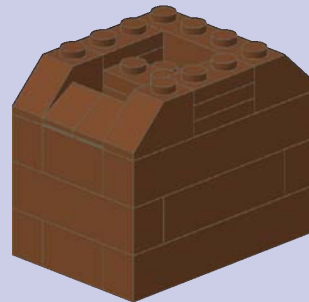
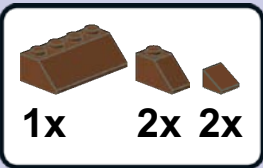
3



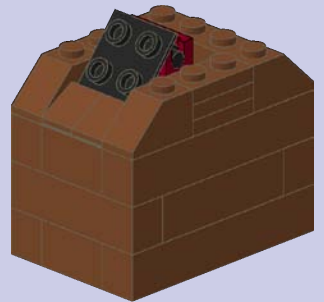
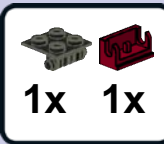
4



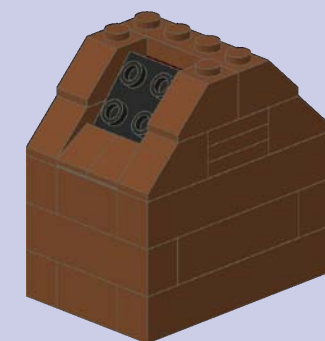
5



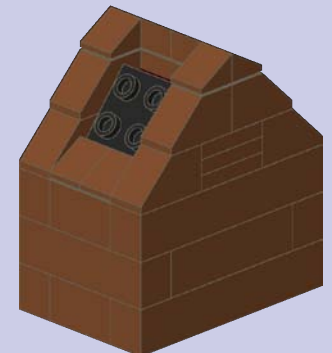
6



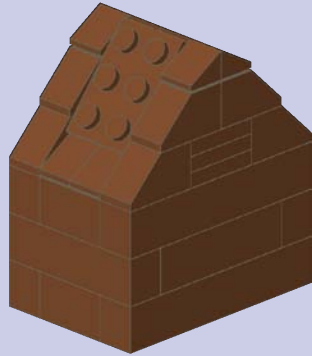
7



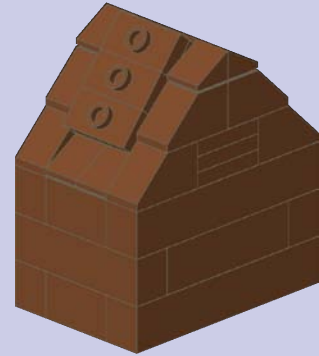
8



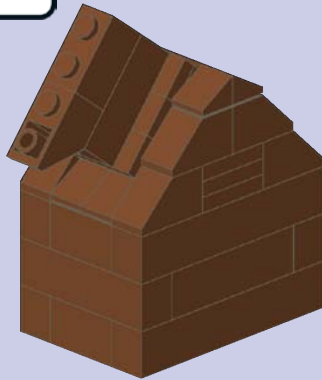
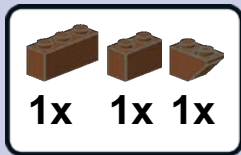
9



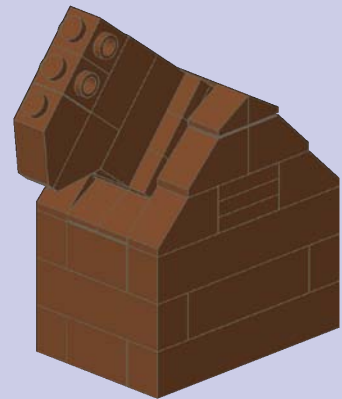
10



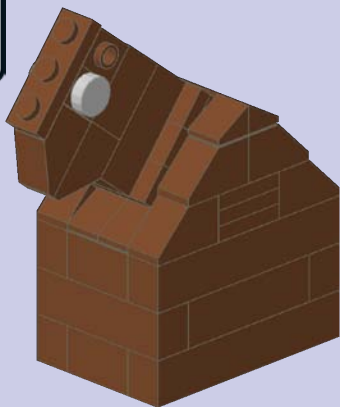
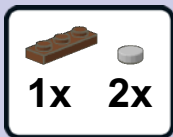
11



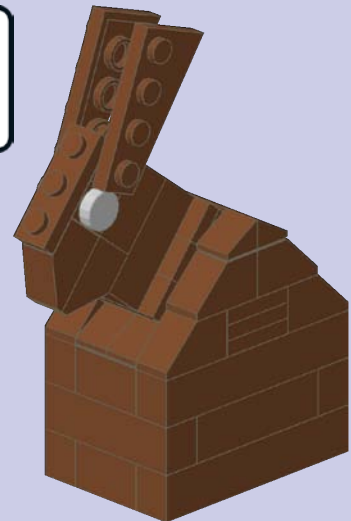
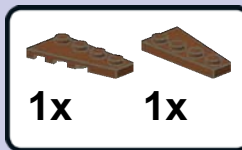
12



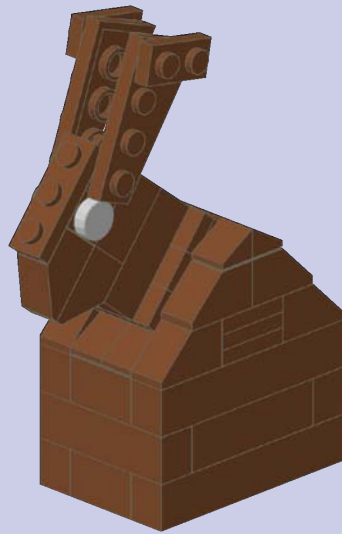
13



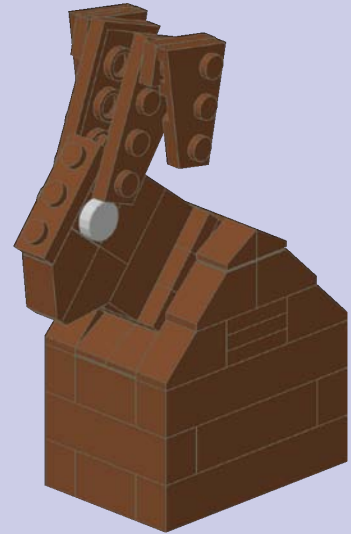
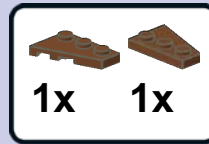
14



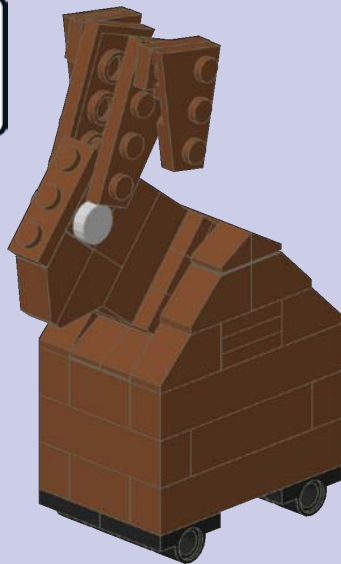
15



16



17



18



Advertise In **Brick Journal**

people • building • community

FULL-COLOR Ad Rates:

Color Back Cover (8.375" x 10.875", full color): \$1200

Inside Front Cover (7.5" x 10", full-color): \$1000

Inside Back Cover (7.5" x 10", full-color): \$1000

Full Page interior (7.5" x 10", full-color): \$800

Half Page interior (7.5" x 4.875", full-color): \$500

Quarter Page interior (3.625" x 4.875", full-color): \$300

These rates are for ads supplied digitally (PDF, JPEG, TIF, EPS, or Quark/InDesign files accepted). No agency discounts apply.

We accept check, money order, and all major credit cards; include card number and expiration date.

Send ad copy and payment (US funds) to: TwoMorrrows Publishing • 10407 Bedfordtown Dr. • Raleigh, NC 27614
919-449-0344 • fax 919-449-0327 • E-mail: twomorrow@aol.com

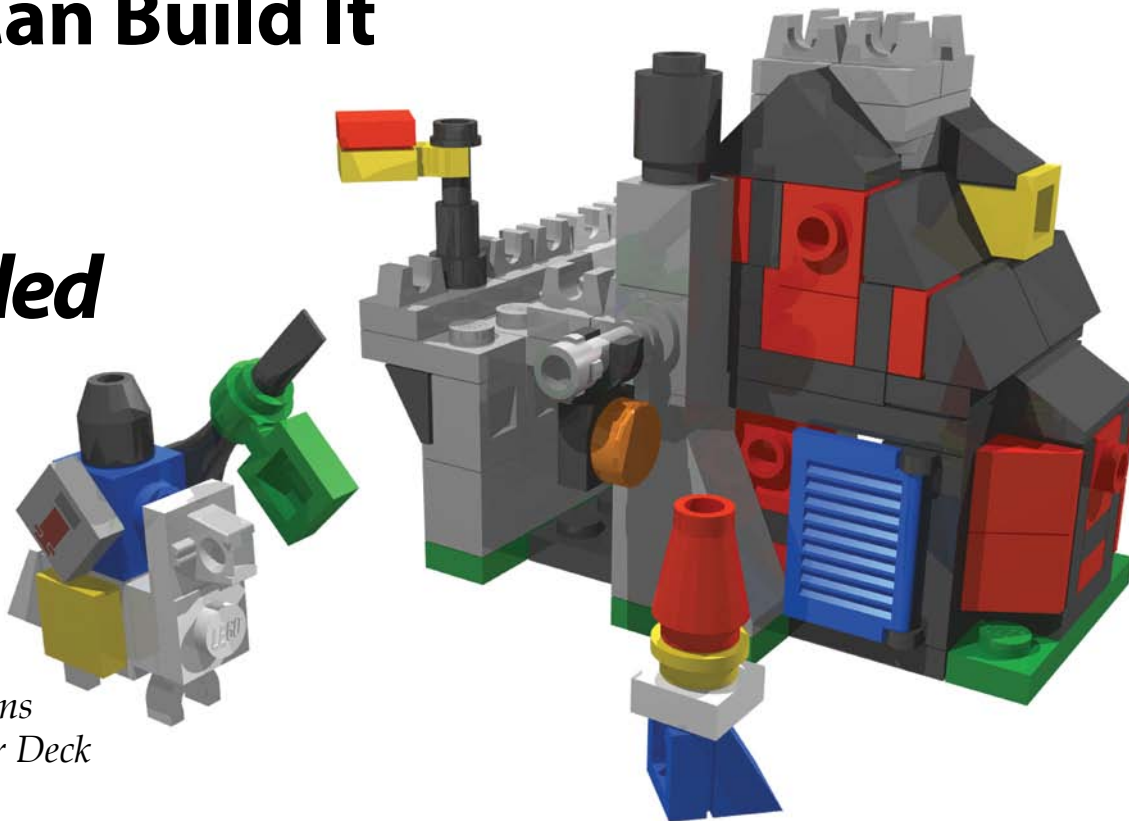


You Can Build It

MINI Model


Micro Guarded Inn

Design
and Instructions
by Christopher Deck



Hello everybody, I am glad to join again for this exciting issue of *BrickJournal*. As in the last castle-themed issue, we want to build a micro version of an official classic castle set here. This time it's all about set "6067: Guarded Inn", which was first released in the year 1986, and later re-released within the Legends line as set number 10000. The Guarded Inn is truly one of the most beautiful and popular castle sets of all time, and thus a great object for minimization, although a very difficult one.

It's very hard to describe how the construction worked out finally, as it was really complicated for this compact building. There are SNOT bricks throughout the entire construction. The most challenging details include the bowfront, the gable with the small window, the timer-framework, and of course the microfigures. I really recommend building this micro set to get a real feeling for the building style and what tricks are used to obtain accuracy and recognition value.

Have fun, and see you next time! 



Parts List

(Parts can be ordered through Bricklink.com by searching by part number and color)

House

Qty	Color	Part	Description
3	Black	3005.dat	Brick 1 x 1
2	Lt-Bluish-Gray	3005.dat	Brick 1 x 1
1	Black	3062b.dat	Brick 1 x 1 Round with Hollow Stud
1	Red	4070.dat	Brick 1 x 1 with Headlight
1	Lt-Bluish-Gray	4070.dat	Brick 1 x 1 with Headlight
1	Red	4733.dat	Brick 1 x 1 with Studs on Four Sides
1	Black	3581.dat	Brick 1 x 1 x 2 with Shutter Holder
1	Lt-Bluish-Gray	577.dat	Minifig Tool Light Sabre Hilt
4	Black	3024.dat	Plate 1 x 1
2	Red	3024.dat	Plate 1 x 1
1	Black	6019.dat	Plate 1 x 1 with Clip Horizontal
3	Black	3023.dat	Plate 1 x 2
1	Green	3023.dat	Plate 1 x 2
1	Lt-Bluish-Gray	3023.dat	Plate 1 x 2
3	Black	3794a.dat	Plate 1 x 2 without Groove with 1 Centre Stud
2	Black	3623.dat	Plate 1 x 3
1	Green	3710.dat	Plate 1 x 4
1	Black	3032.dat	Plate 4 x 6
4	Red	50746.dat	Slope Brick 31 1 x 1 x 2/3
1	Black	85984.dat	Slope Brick 31 1 x 2 x 2/3
1	Black	3665.dat	Slope Brick 45 2 x 1 Inverted
1	Lt-Bluish-Gray	60481.dat	Slope Brick 65 2 x 1 x 2
1	Black	6541.dat	Technic Brick 1 x 1 with Hole
1	Lt-Bluish-Gray	6541.dat	Technic Brick 1 x 1 with Hole
1	Pearl-Gold	98138.dat	Tile 1 x 1 Round with Groove
2	Black	2431.dat	Tile 1 x 4 with Groove
1	Blue	3582.dat	Window 1 x 2 x 2 Shutter

Wall

Qty	Color	Part	Description
9	Lt-Bluish-Gray	4070.dat	Brick 1 x 1 with Headlight
3	Lt-Bluish-Gray	3622.dat	Brick 1 x 3
1	Black	64644.dat	Minifig Telescope
1	Green	3024.dat	Plate 1 x 1
1	Lt-Bluish-Gray	3024.dat	Plate 1 x 1
1	Yellow	4085c.dat	Plate 1 x 1 with Clip Vertical
1	Lt-Bluish-Gray	3023.dat	Plate 1 x 2
2	Green	3710.dat	Plate 1 x 4
1	Lt-Bluish-Gray	3020.dat	Plate 2 x 4
1	Lt-Bluish-Gray	3031.dat	Plate 4 x 4
5	Black	50746.dat	Slope Brick 31 1 x 1 x 2/3
10	Lt-Bluish-Gray	2555.dat	Tile 1 x 1 with Clip

1	Red	3070b.dat	Tile 1 x 1 with Groove
1	Lt-Bluish-Gray	63864.dat	Tile 1 x 3 with Groove

Roof

Qty	Color	Part	Description
1	Red	4070.dat	Brick 1 x 1 with Headlight
1	Yellow	4070.dat	Brick 1 x 1 with Headlight
1	Red	4733.dat	Brick 1 x 1 with Studs on Four Sides
1	Black	47905.dat	Brick 1 x 1 with Studs on Two Opposite Sides
1	Black	3024.dat	Plate 1 x 1
2	Red	3024.dat	Plate 1 x 1
4	Black	3623.dat	Plate 1 x 3
2	Black	3710.dat	Plate 1 x 4
1	Black	3022.dat	Plate 2 x 2
1	Lt-Bluish-Gray	3022.dat	Plate 2 x 2
1	Black	2420.dat	Plate 2 x 2 Corner
1	Lt-Bluish-Gray	4032b.dat	Plate 2 x 2 Round with Axlehole
1	Black	3021.dat	Plate 2 x 3
3	Black	50746.dat	Slope Brick 31 1 x 1 x 2/3
6	Black	85984.dat	Slope Brick 31 1 x 2 x 2/3
2	Black	3044a.dat	Slope Brick 45 2 x 1 Double with Hollow Bottom
2	Black	6541.dat	Technic Brick 1 x 1 with Hole
4	Lt-Bluish-Gray	2555.dat	Tile 1 x 1 with Clip
1	Black	3070b.dat	Tile 1 x 1 with Groove

Microfigures

Qty	Color	Part	Description
1	Blue	4733.dat	Brick 1 x 1 with Studs on Four Sides
1	White	4733.dat	Brick 1 x 1 with Studs on Four Sides
1	White	30383.dat	Hinge Plate 1 x 2 Locking with Single Finger On Top
1	Black	752.dat	Hose Flexible End 1 x 1 x 2/3 without Tabs
1	Black	4006.dat	Minifig Tool Spanner/Screwdriver
1	Green	4081b.dat	Plate 1 x 1 with Clip Light
2	White	4085c.dat	Plate 1 x 1 with Clip Vertical
1	White	50746.dat	Slope Brick 31 1 x 1 x 2/3
1	Lt-Gray	3070bps1.dat	Tile 1 x 1 With SW Mini Snowspeeder Pattern
2	Yellow	3070b.dat	Tile 1 x 1 with Groove
1	Red	4589.dat	Cone 1 x 1
1	Blue	3024.dat	Plate 1 x 1
1	White	3024.dat	Plate 1 x 1
1	Yellow	6141.dat	Plate 1 x 1 Round
1	Blue	50746.dat	Slope Brick 31 1 x 1 x 2/3

1

- 1x
- 1x
- 1x

2

- 1x
- 1x
- 1x
- 2x
- 1x

3

- 1x
- 2x
- 1x
- 1x
- 1x
- 1x

4

- 1x
- 1x
- 1x

5

- 1x
- 1x
- 1x
- 1x
- 2x
- 2x

6

- 1x
- 1x
- 1x
- 4x

7

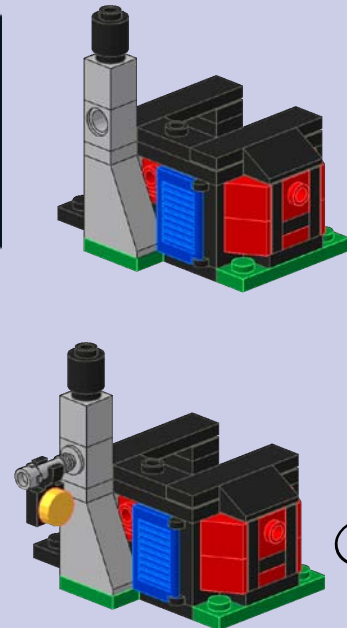
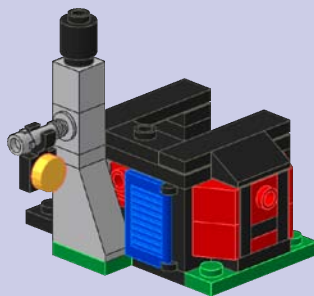
- 1x
- 2x

8

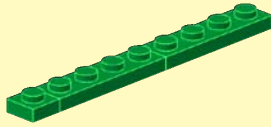
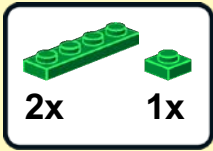
- 1x
- 1x
- 1x

9

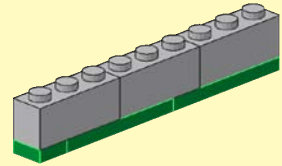
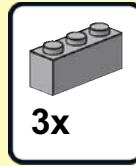
- 1x
- 1x
- 1x
- 1x



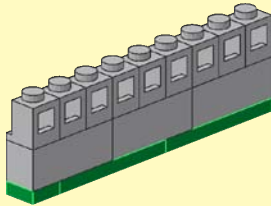
1



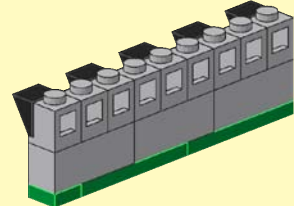
2



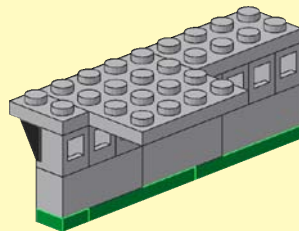
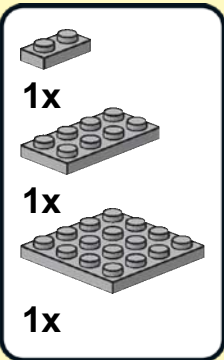
3



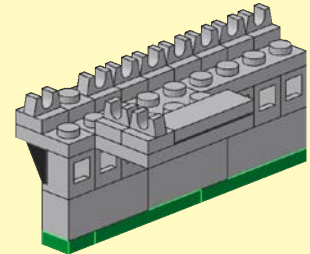
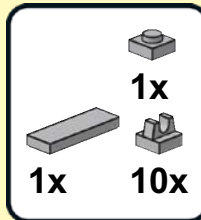
4



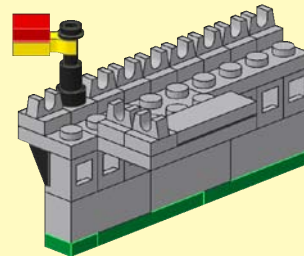
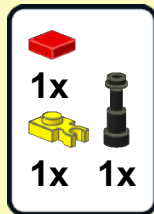
5



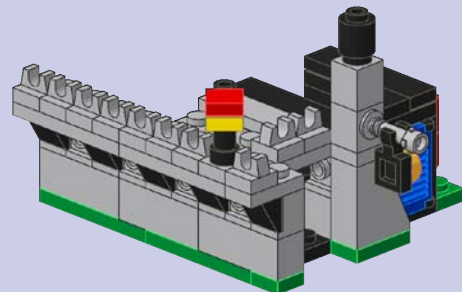
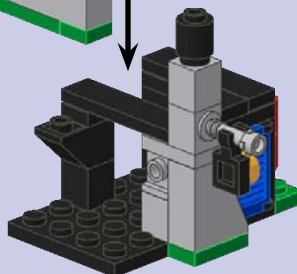
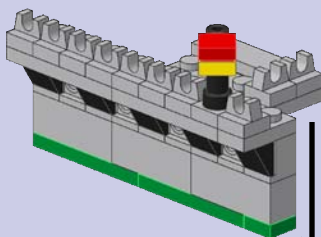
6

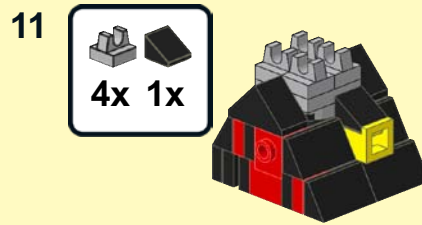
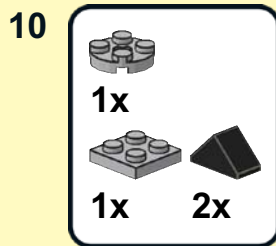
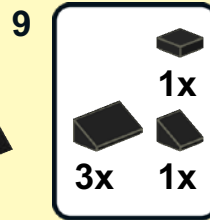
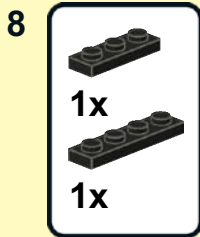
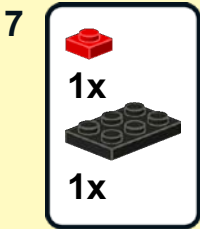
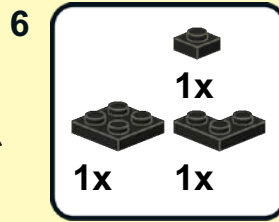
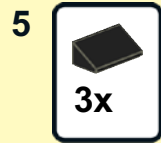
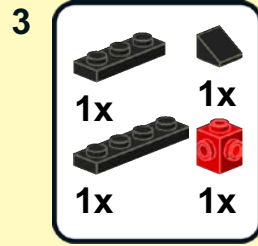
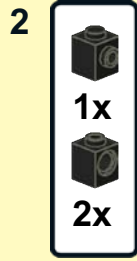


7

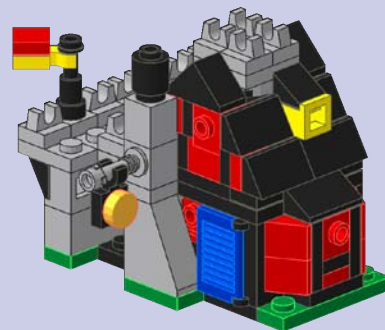
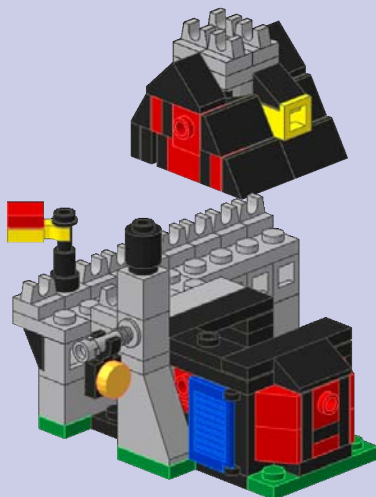




9










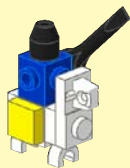






10



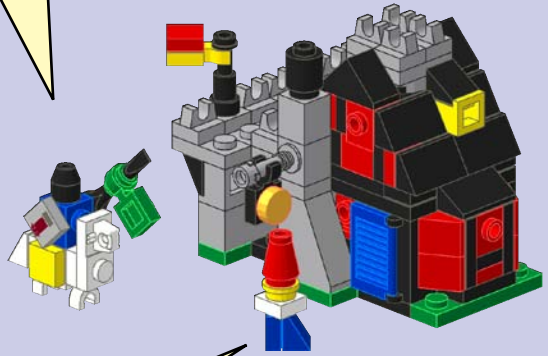
1  1x 




2  2x  1x  





3  1x  1x  1x 

4  1x  1x  1x 

11



1  1x  1x 

2  1x  1x  1x 

BEST SELECTION OF LEGO® COLLECTIBLES & LEGO® SETS



facebook.com/ChowrenToys
FOR AMAZING DEALS
AND GIVEAWAYS

FREE LEGO® POLYBAG WITH \$50 PURCHASE*



*Make sure to type in "BrickJ30050" for 30050 or "BrickJ30012" for 30012 in the special instructions during the check out to receive this special offer

Hey Kids! Comics!

by Greg (AFOLs) Hyland

Lethargic Lad: Topics of Unclear Importance is a complete collection of seven years of Lethargic Lad comics! Presenting over 350 strips from the lethargiclad.com website and all the Lethargic Lad three-page comics that originally appeared in the pages of *Dork Tower* comics.

"Greg just gets it right: the situations, the ongoing storylines, the characterizations, the understated but gut-busting payoffs... Fans of the Lad are fans for life!"

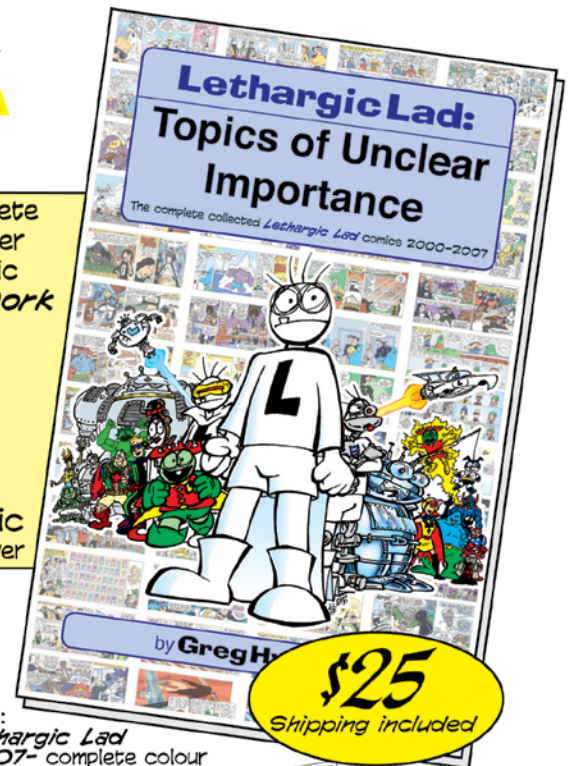
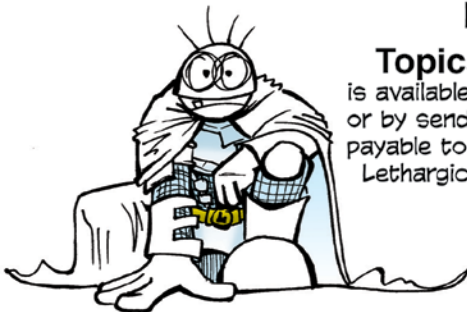
-John Kovalic
Dork Tower

Lethargic Lad:

Topics of Unclear Importance

is available exclusively at www.lethargiclad.com or by sending check or money order made payable to "Greg Hyland" to:

Lethargic Lad: Topics of Unclear Importance
60 East Ave. N.
Hamilton, Ontario
Canada
L8L 5H5



\$25
Shipping included

Also:
Lethargic Lad 2007 - complete colour collection of 2007's strips! \$20
Lethargic Lad 2008 - complete colour collection of 2008's strips! \$20



Last Word

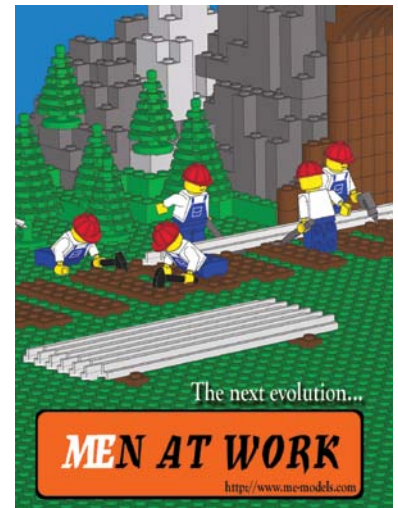


As a matter of fact, I DO look like this after putting together an issue!

Anyways, hope you enjoyed this issue! We'll be back in a couple of months to show off Mythical (and not-so-mythical) Creatures with Sean and Steph Mayo, better known on Flickr as Sieran and Coral, and we'll have the usual blend of articles, instructions and diagrams stuffed into 80 pages... although I may need a shoehorn this time!

See you in 2 months!

PS—Who are the others? On the left is Benjamin Davis, whose dad is Biran Davis, one of the top MINDSTORMS builders in the country. Ben can build really well too. And the young lady is Olivia Donahue, daughter of Rafe Donahue, who builds a mean Great Ball Contraption module! And this was at Brickworld!

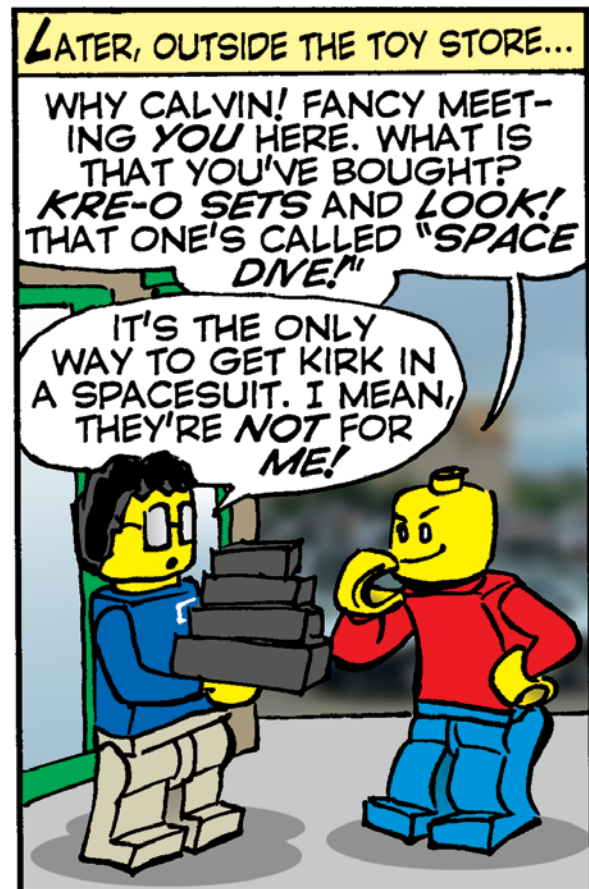
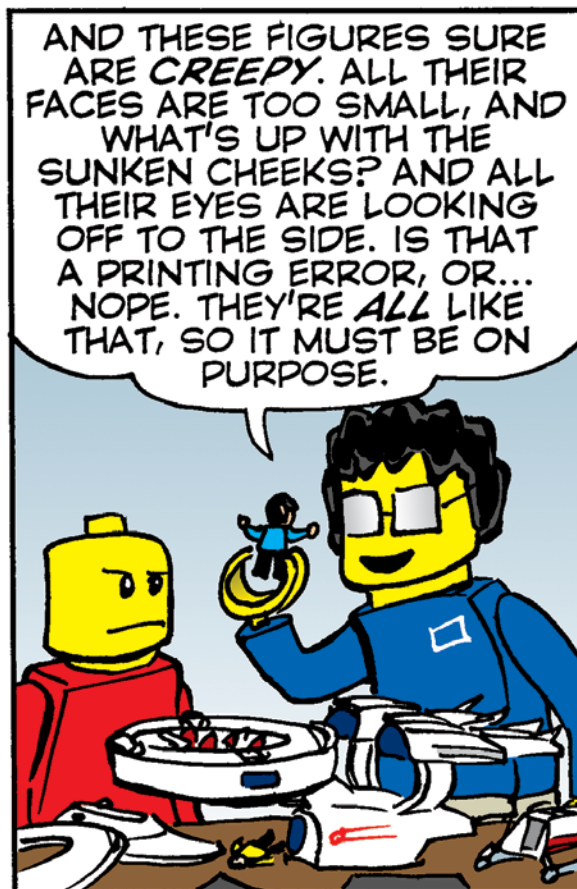
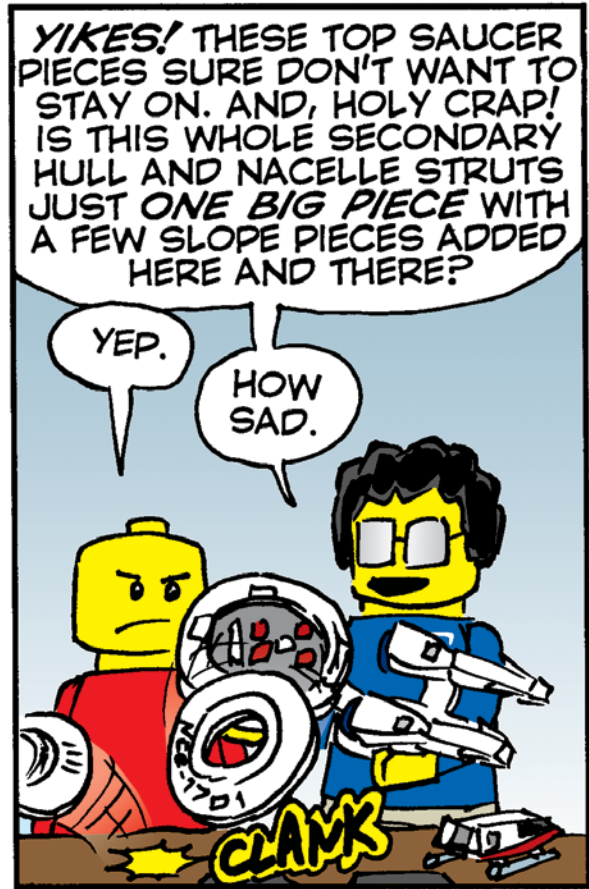
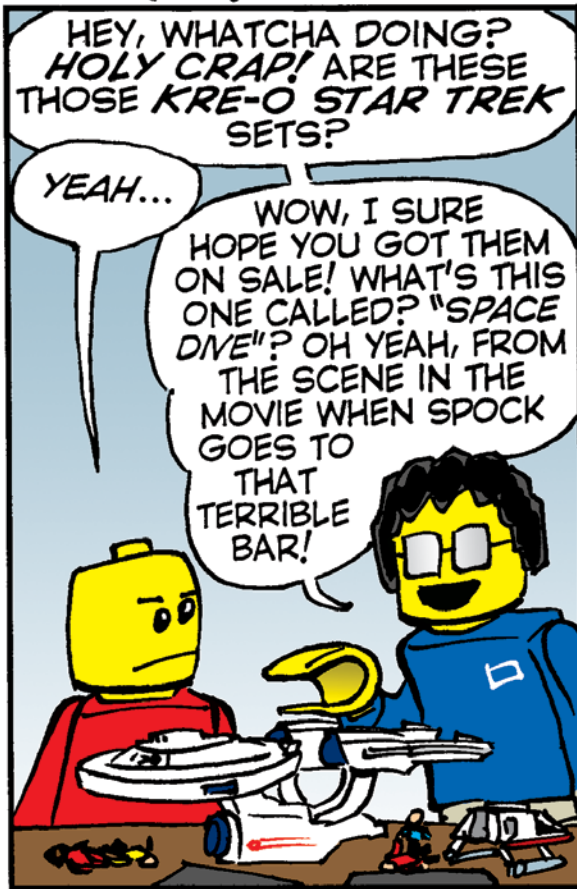


KAMINOAN'S FINE CLONIER DECALS

www.fineclonier.com

Kaminoan's Fine Clonier. For all your minifig decal customization needs.

A promotional banner for 'Kaminoan's Fine Clonier Decals'. The banner features the text 'KAMINOAN'S FINE CLONIER DECALS' in large, stylized white letters against a blue background. Below the text, there are five LEGO minifigures with custom decals: a red and white figure, a purple figure, a brown figure holding a pink lightsaber, a red and white figure on a motorcycle, and a grey figure. The website 'www.fineclonier.com' is displayed in the top right corner. At the bottom, the text 'Kaminoan's Fine Clonier. For all your minifig decal customization needs.' is written in white.



Brick Journal

people • building • community

THE MAGAZINE FOR LEGO® ENTHUSIASTS OF ALL AGES!



BRICKJOURNAL magazine (edited by Joe Meno) spotlights all aspects of the LEGO® Community, showcasing events, people, and models every issue, with contributions and how-to articles by top builders worldwide, new product intros, and more. Available in both FULL-COLOR print and digital editions. Print subscribers get the digital version FREE!

LEGO, the Minifigure, and the Brick and Knob configurations are trademarks of the LEGO Group of Companies.

DIGITAL EDITIONS AVAILABLE FOR ONLY \$3.95



BRICKJOURNAL #1

The ultimate resource for LEGO enthusiasts of all ages, showcasing events, people, and models! FULL-COLOR #1 features an interview with Certified LEGO Professional NATHAN SAWAYA, car designs by STEPHAN SANDER, step-by-step building instructions and techniques for all skill levels, new set reviews, on-the-scene reports from LEGO community events, and other surprises!

(84-page print magazine) SOLD OUT
(Digital Edition) \$3.95



BRICKJOURNAL #2

This FULL-COLOR issue spotlights blockbuster summer movies, LEGO style! Go behind the scenes for new sets for INDIANA JONES, and see new models, including a MINI FLYING WING and a LEGO CITY, a lifelike IRON MAN, plus how to CUSTOMIZE MINIFIGURES, BUILDING INSTRUCTIONS, a tour of the ONLINE LEGO FACTORY, and lots more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95

PRINT SUBSCRIPTIONS: Six issues \$57 US (\$75 Canada, \$86 elsewhere)
DIGITAL SUBSCRIPTIONS: \$23.70 for six digital issues



BRICKJOURNAL #3

Event Reports from BRICKWORLD, FIRST LEGO LEAGUE WORLD FESTIVAL and PIECE OF PEACE (Japan), spotlight on our cover model builder BRYCE MCGLONE, behind the scenes of LEGO BATMAN, LEGO at COMIC-CON INTERNATIONAL, FIRST LEGO LEAGUE WORLD FESTIVAL, plus STEP-BY-STEP BUILDING INSTRUCTIONS, TECHNIQUES, and more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #4

Interviews with LEGO BUILDERS including cover model builder ARTHUR GUGICK, event reports from BRICKFAIR and others, touring the LEGO IDEA HOUSE, plus STEP-BY-STEP BUILDING INSTRUCTIONS and TECHNIQUES for all skill levels, NEW SET REVIEWS, and an extensive report on constructing the Chinese Olympic Village in LEGO!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #5

Event report on the MINDSTORMS 10th ANNIVERSARY at LEGO HEADQUARTERS, Pixar's ANGUS MACLANE on LEGO in filmmaking, a glimpse at the LEGO Group's past with the DIRECTOR OF LEGO'S IDEA HOUSE, event reports, a look at how SEAN KENNEY's LEGO creations ended up on NBC'S 30 ROCK television show, instructions and spotlights on builders, and more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #6

Spotlight on CLASSIC SPACE SETS and a look at new ones, BRANDON GRIFFITH shows his STAR TREK MODELS, LEGO set designers discuss their work creating the SPACE POLICE with PIRATE SETS, POWER FUNCTIONS TRAIN DEVELOPMENT, the WORLD'S TALLEST LEGO TOWER, MINI-FIGURE CUSTOMIZATION, plus coverage of BRICKFEST 2009 and more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #7

Focuses on the new LEGO ARCHITECTURE line, with a look at the new sets designed by ADAM REED TUCKER, plus interviews with other architectural builders, including SPENCER REZKALLA. Also, behind the scenes on the creation of POWER MINERS and the GRAND CAROUSEL, a LEGO BATTLESHIP over 20 feet long, reports from LEGO events worldwide, and more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #8

We go to the Middle Ages, with a look at the LEGO Group's CASTLE LINE, featuring an interview with the designer behind the first LEGO castle set, the YELLOW CASTLE. Also: we spotlight builders that have created their own large-scale version of the castle, and interview other castle builders, plus a report on BRICKWORLD in Chicago, and still more instructions and building tips!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #9

BrickJournal looks at LEGO® DISNEY SETS, with features on the Disney LEGO sets of the past (MICKEY and MINNIE) and present (TOY STORY and PRINCE OF PERSIA)! We also present Disney models built by LEGO fans, and a look at the newest Master Build model at WALT DISNEY WORLD, plus articles and instructions on building and customization, and more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #10

BrickJournal goes undersea with looks at the creation of LEGO's new ATLANTIS SETS, plus a spotlight on a fan-created underwater theme, THE SEA MONKEYS, with builder FELIX GRECO! Also, a report on the LEGO WORLD convention in the Netherlands, BUILDER SPOTLIGHTS, INSTRUCTIONS and ways to CUSTOMIZE MINIFIGURES, LEGO HISTORY, and more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #11

"Racers" theme issue, with building tips on race cars by the ARVO BROTHERS, interview with LEGO RACERS designer ANDREW WOODMAN, LEGO FORMULA ONE RACING, TECHNIC SPORTS CAR building, event reports, instructions and columns on MINIFIGURE CUSTOMIZATION and MICRO BUILDING, builder spotlights, LEGO HISTORY, and more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #12

A look at school sculptures by NATHAN SAWAYA, builder MARCOS BESSA's creations, ANGUS MACLANE's CubeDudes, a Nepali Diorama by JORDAN SCHWARTZ, instructions to build a school bus for your LEGO town, minifigure customizations, how a POWER MINERS model became one for ATLANTIS, building standards, and much more!

(84-page FULL-COLOR magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #13

Special **EVENT ISSUE** with reports from **BRICKMAGIC** (the newest US LEGO fan festival, organized by *BrickJournal* magazine), **BRICKWORLD** (one of the oldest US LEGO fan events), and others! Plus: spotlight on **BIONICLE** builder **NORBERT LAGUBUEN**, our regular column on minifigure customization, step-by-step "You Can Build It" instructions, spotlights on builders and their work, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #14

Discover the world of stop-motion **LEGO FILMS**, with brickfilmmaker **DAVID PAGANO** and others spotlighting LEGO filmmaking, the history of the medium and its community, interviews with the makers of the films seen on the **LEGO CLUB SHOW** and **LEGO.com**, and instructions on how to film and build puppets for brick flicks! Plus how to customize minifigures, event reports, step-by-step building instructions, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #15

Looks at the **LEGO MECHA** genre of building, especially in Japan! Feature editor **NATHAN BRYAN** spotlights mecha builders such as **SAITO YOSHIKAZU**, **TAKAYUKI TORII**, **SUKYU** and others! Also, a talk with **BRIAN COOPER** and **MARK NEUMANN** about their mecha creations, mecha building instructions by **SAITO YOSHIKAZU**, our regular columns on minifigure customization, building, event reports, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #16

Focuses on **STEAMPUNK!** Feature editor **GUY HIMBER** gives a tour with a look at his work, **DAVE DEGOBBI**'s, **NATHAN PROUDLOVE**'s, and others! There's also a look at the history of **LEGO Steampunk** building, as well as instructions for a Steampunk plane by **ROD GILLIES!** Plus our regular columns on minifigure customization, building tips, event reports, our step-by-step "You Can Build It" instructions, and much more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #17

LEGO SPACE WAR issue! A **STARFIGHTER BUILDING LESSON** by Peter Reid, **WHY SPACE MARINES ARE SO POPULAR** by Mark Stafford, a trip behind the scenes of **LEGO'S NEW ALIEN CONQUEST SETS** that hit store shelves earlier this year, plus **JARED K. BURKS'** column on **MINIFIGURE CUSTOMIZATION**, building tips, event reports, our step-by-step "YOU CAN BUILD IT" INSTRUCTIONS, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #18

Go to Japan with articles on two **JAPANESE LEGO FAN EVENTS**, plus take a look at **JAPAN'S SACRED LEGO LAND**, Nasu Highland Park—the site of the BrickFan events and a pilgrimage site for many Japanese LEGO fans. Also, a feature on **JAPAN'S TV CHAMPIONSHIP OF LEGO**, a look at the **CLICKBRICK LEGO SHOPS** in Japan, plus how to get into **TECHNIC BUILDING**, **LEGO EDUCATION**, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #19

LEGO EVENTS ISSUE covering our own **BRICKMAGIC FESTIVAL**, **BRICKWORLD**, **BRICKFAIR**, **BRICKCON**, plus other events outside the US. There's full event details, plus interviews with the winners of the **BRICKMAGIC CHALLENGE** competition, complete with instructions to build award winning models. Also **JARED K. BURKS'** regular column on minifigure customizing, building tips, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #20

LEGO SUPERHEROES! Behind-the-scenes of the DC and Marvel Comics sets, plus a feature on **GREG HYLAND**, the artist of the superhero comic books in each box! Also, other superhero work by **ALEX SCHRANZ** and our cover artist **OLIVIER CURTO**. Plus, **JARED K. BURKS'** regular column on minifigure customization, building tips, step-by-step "You Can Build It" instructions, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #21

LEGO CAR BUILDING! Guest editors **LINO MARTINS** and **NATHAN PROUDLOVE** of **LUGNUTS** share secrets behind their LEGO car creations, and present **TECHNIC SUPERCAR MODELS** by **PAUL BORATKO III** and other top builders! Plus custom instructions by **TIM GOULD** and **CHRISTOPHER DECK**, minifigure customization by **JARED BURKS**, step-by-step "You Can Build It" section, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #22

LEGO PLANE BUILDING! Top builder **RALPH SAVELSBERG** takes off with his custom LEGO fighter models, there's a squadron of articles on Sky-Fi planes by **FRADEL GONZALES** and **COLE MARTIN**, find instructions to build a Sky-Fi plane, plus our regular feature on minifigure customization by **JARED BURKS**, **AFOLs** by **GREG HYLAND**, other step-by-step "You Can Build It" instructions, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #23

STAR WARS issue, with custom creations from a long time ago and far, far away! **JACOB CARPENTER**'s Imperial Star Destroyer, **MARK KELSO**'s Invisible Hand, interview with **SIMON MACDONALD** about building Star Wars costume props with LEGO elements, history of the **LEGO X-Wing**, plus our regular features on minifigure customization by **JARED BURKS**, "You Can Build It" instructions, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95



BRICKJOURNAL #25

MEDIEVAL CASTLE BUILDING! Top LEGO® Castle builders present their creations, including **BOB CARNEY**'s amazingly detailed model of Neuschwanstein Castle, plus others, along with articles on building and detailing castles of your own! Also: **JARED BURKS** on minifigure customization, **AFOLs** by cartoonist **GREG HYLAND**, step-by-step "You Can Build It" instructions by **CHRISTOPHER DECK**, and more!

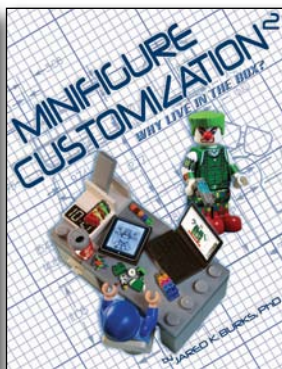
(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95 • Ships July 2013



BRICKJOURNAL #26

CREATURES GREAT AND SMALL with builders **SEAN** and **STEPHANIE MAYO** (known online as Sieron and Coral), other custom animals models from BrickJournal editor **JOE MENO**, **LEGO DINOSAURS** with **WILL PUGH**, plus more minifigure customization by **JARED BURKS**, **AFOLs** by cartoonist **GREG HYLAND**, step-by-step "You Can Build It" instructions by **CHRISTOPHER DECK**, and more!

(84-page **FULL-COLOR** magazine) \$8.95
(Digital Edition) \$3.95 • Ships Sept. 2013



MINIFIGURE CUSTOMIZATION 2: WHY LIVE IN THE BOX?

JARED K. BURKS' sequel presents more advanced techniques to alter minifigures: virtual customization; designing decals; custom part modification and creation; 3-D printing; painting techniques; lighting with LEDs or EL wire; ideas on displays and digital photography; plus a custom Gallery with tips & tricks.

(80-page **FULL-COLOR** book) \$9.95
(Digital Edition) \$3.95 • Ships Nov. 2013



TwoMorrows. A New Day For LEGO Fans!

TwoMorrows Publishing
10407 Bedfordtown Drive
Raleigh, NC 27614 USA
919-449-0344

E-mail: store@twomorrowspubs.com

Visit us on the Web at
twomorrows.com

