



HexmakerTM



Copyright © 1997 VIRTUS Corporation. All rights reserved.

Products are copyrighted and/or trademarked by their respective owners. All rights reserved.

Macmillan Digital Publishing is the software publishing group of Macmillan Publishing USA.

COPYRIGHT & CREDITS

THIS PRODUCT IS LICENSED (NOT SOLD) TO YOU BY ITS MANUFACTURER, VIRTUS CORPORATION. YOUR USE OF THIS PRODUCT IS RESTRICTED BY THE TERMS OF THE LICENSE AGREEMENT INCLUDED WITH THE PRODUCT. BY USING THE PRODUCT YOU INDICATE YOUR ACCEPTANCE OF THE LICENSE TERMS.

Hexmaker copyright © 1997 VIRTUS Corporation. All rights reserved.

Published under license by Ubi Soft Entertainment

HEXEN II™ Texture Graphics and Artwork © 1997 Raven Software Corporation. All Rights Reserved. HEXEN II™ and the Raven name are trademarks of Raven Software Corporation used under sublicense.

VIRTUS and the Virtus logo are registered trademarks and Hexmaker is a trademark of Virtus Corporation. Windows is a trademark of Microsoft Corporation. All other brand or product names are trademarks of registered trademarks of their respective holders.

Table of Contents

1. Minimum System Requirements
2. About this Guide
3. Further Reading
4. How to Install
5. CD Contents
6. Building a Hexen II Level in 30 Minutes
 - 6.1 Install Hexmaker
 - 6.2 Open Hexmaker
 - 6.3 Some Basic Hexmaker Parts
 - 6.4 Drag & Drop a Template onto the Design Window
 - 6.5 Player Starting Position
 - 6.6 Changing Textures
 - 6.7 Add Badguys and Power Ups
 - 6.8 Save Your File
 - 6.9 Before Exporting Your New Level to Hexen II
 - 6.10 Export Your New Level to Hexen II
 - 6.11 Test Your Level in Hexen II
7. Using the Acrobat Reader
8. Product Support

qART-Lite is included on this CD-ROM by permission of the respective Copyright owner. For more information, upgrades, help, and full versions of these programs, please visit <http://www.3dmatrix.com> or email info@3dmatrix.com.

comqME-Lite is included on this CD-ROM by permission of the respective Copyright owner. For more information, upgrades, help, and full versions of these programs, please visit <http://www.3dmatrix.com> or email info@3dmatrix.com.

AdQuedit is included on this CD-ROM by permission of the respective Copyright owner. For more information, upgrades, or help, please visit <http://goldrush.com/~hicks/adquedit/> or email cjhicks@sfsu.edu.

QuickStart guide and on-line help written by David Mullins and Lee Bumgarner. Edited by Bob Griswold. Virtus engineers Bob Griswold, Beth Graff, Alan Shaw, Peter Scott, Eric Sage, and Scott Haynes. Marketing John Cooper and Scott Place. Virtus artists Bryan Baldwin, Bert McLendon, John Michel, Scott Sprange, and Geoff Yarbrough. QA Ann Grundstrom, Ismini Boinodiris, and Steve Barber.

Special thanks to Raven and id Software for providing the world with another great game and for allowing us to create an editor based on the game.

Thank You for purchasing Hexmaker !

Hexmaker™ provides everything that you need to create and edit 3-D worlds for Hexen II™. Hexmaker features an easy to use drag and drop interface that lets you work with pre-created content to build Hexen II worlds quickly. You can also use the modeling and construction tools to create your own items and to build structures that extend beyond the pre-created content.

1. Minimum System Requirements

Before you install the software, make sure your computer has the following minimum hardware and software requirements:

- Pentium processor PC with CD-ROM Drive
- Registered copy of Hexen II™ and Windows® 95
- 16M RAM (24M+ recommended)
- 40M free hard disk space
- SVGA 256-color graphics

2. About this Guide

This is a QuickStart guide designed to get you up and working with Hexmaker. This guide includes information on installation, the product interface, and a brief tutorial to get you familiar with creating 3-D levels in Hexmaker. If you have used Virtus products in the past, you may just want to quickly look over this guide and get right to building.

If you want more in depth information about Hexmaker than is provided in this guide, check out the on-line help file. The application interface is fully documented in this help file, and it is keyword enabled to make finding information that you need quick and easy.

3. Further Reading

For more information on Hexmaker, check out the Web Site at www.hexmaker.com. If you have installation and setup problems, email techsupport@ubisoft.co.uk

4. How to Install

Note: Hexen II must first be installed before proceeding with this installation.

Follow these steps to install your Hexmaker application:

1. Insert the Hexmaker CD-ROM into the CD-ROM drive.
2. Run setup.exe from the root directory of the CD-ROM drive.
3. Select the installation options in the dialog box. The default installation is the Hexmaker application and all the contents.
4. Hexmaker contains material depicting blood and gore. Select the appropriate box to exclude the material if you so desire. Doing this will not restrict your ability to make full levels.

As the program is installed, a progress meter shows the status of the installation.

Note: There is a parental lock feature that prevents the violent textures from being installed.

5. CD Contents

In addition to the Hexmaker installer, we have some extra goodies stashed on our Hexmaker CD. Other software that can be copied from the CD include:

Hexen II DOS compilers QBSP, Vis, Light, Hcc, qART-Lite, qME-Lite, and AdQuedit in the \Extras\Utilities directory.

Compiled versions of the template levels in the \Extras\Templates directory. To use the compiled levels, copy the .bsp files into your HexenII\data1\maps directory. If there is no maps directory, create one. Once copied, run Hexen II. From the console, which you access by pressing the ~ (tilde) key, type map [name of map], where [name of map] is replaced with the template level you want to play. Then, press Enter. The desired level should load.

The full uncompressed application with all of its parts is also on the CD under program. This is done in case the installer does not work on your computer or in case you delete a file or two by mistake and do not want to reinstall the entire application again.

qART-Lite and *qME-Lite* are included on this CD-ROM by permission of their respective Copyright owners. For more information, upgrades, help, and full versions of these programs, please visit <http://www.3dmatrix.com> or email info@3dmatrix.com

AdQuedit is included on this CD-ROM by permission of the respective Copyright owner. For more information, upgrades, or help, please visit <http://claim.goldrush.com/~hicks/adquedit/> or email cjhicks@sfsu.edu

6. Building a Hexen II Level in 30 Minutes

In this tutorial, we show you how to drag and drop a template into the Design Window, drag and drop already-built objects into the template, change textures, export your new level to Hexen II, and play in Hexen II.

6.1 Install Hexmaker

If you haven't done so already, install Hexmaker on your computer following the directions in the "How To Install" section.

6.2 Open Hexmaker

Once Hexmaker is installed, open Hexmaker. To do this, click on the Windows 95 Start button. Select the Programs folder, the Hexmaker folder, and the Hexmaker icon.

6.3 Some Basic Hexmaker Parts

Let's talk about some of the parts of the Hexmaker Window first. To the left of the Hexmaker Window is the Tools Pad. It holds tools you will use to work on objects.

Across the top of the Hexmaker Window is the menu bar with File, Edit, Design, Window, and About.

Just below the menu bar and to the left is the Gallery Window. It has two tabs: Gallery and Textures. When you click on the Gallery tab, the Gallery View appears. When you click on the Textures tab, the Textures View appears.

Just below the menu bar and to the right is the Design Window. You will create your level here. Below the Design Window is the Walk Window. In the Walk Window, you can see a three-dimensional view of your level and explore it as you build.

You'll notice a couple of things about the Design Window. At the lower-left of the Design Window are T, F, and R buttons. You can change your level to the Top, Front, or Right view. The Top View is the default view. Use Top View for now.

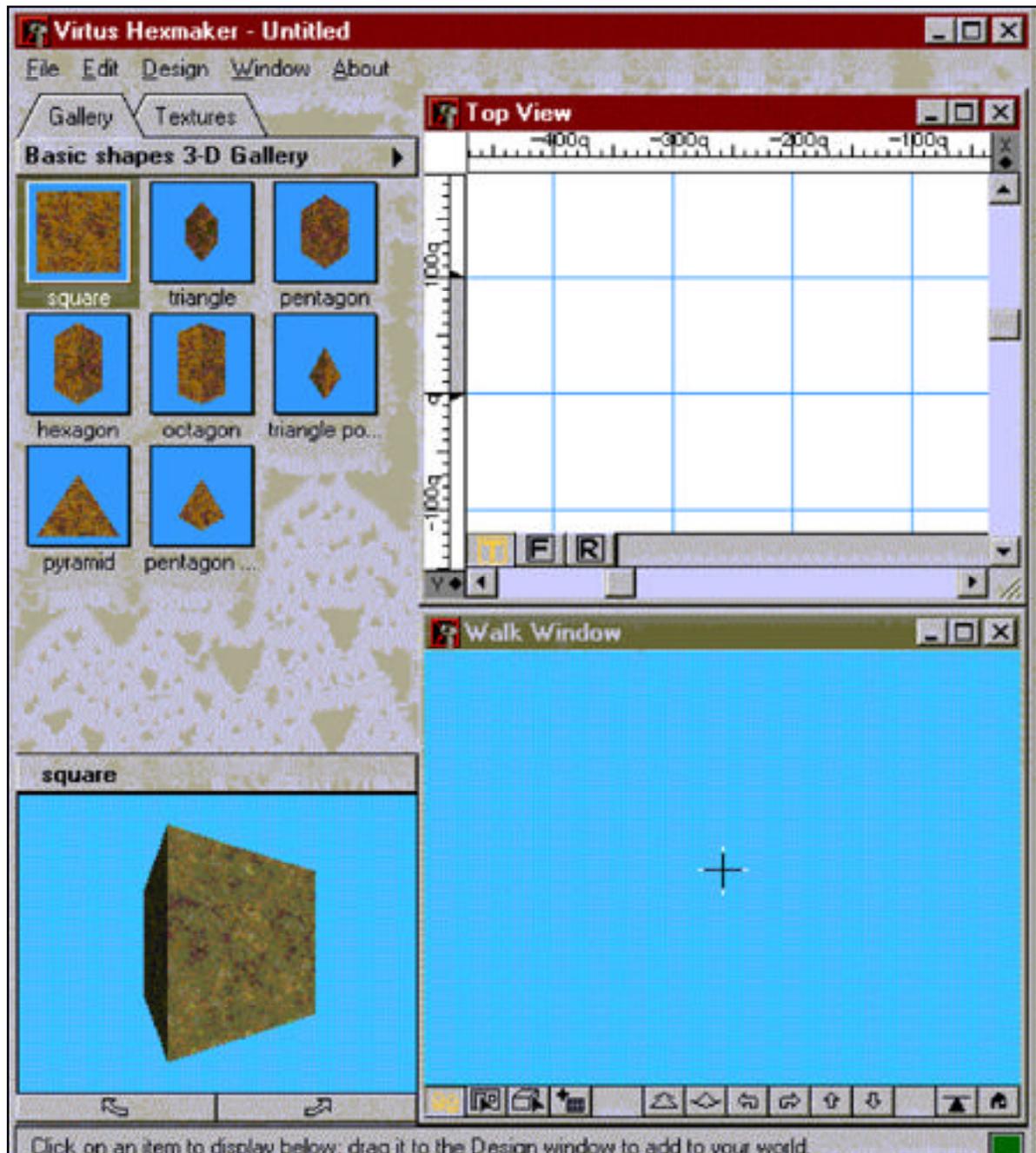


Rulers are at the top and left sides of the view and are in Hexen II units. The units represent about 10 Hexen II units to the inch. Blue lines form a grid in the view. They help you to measure your space and place your objects within it.

You might need to use the Zoom-In tool in the Design Window to see all of the parts of a level. To use the Zoom-In tool you need to first activate the Design Window. Select the Zoom-In Tool from the Tools Pad (it looks like a magnifying glass with a plus [+] sign), and then click in the Design Window so your level will zoom toward you getting larger.



To select the Zoom-Out Tool press the Ctrl key (the Zoom-In tool now becomes the Zoom-Out tool and looks like a magnifying glass with a minus [-] sign). Now, click in the Design Window so your level will zoom away from you getting smaller.



Note: When you use the Zoom-In and Zoom-Out tools to make objects bigger or smaller in the Design Window, you can lose sight of the part you need to work with. To prevent this from happening:

-
1. Select the object using the Select Object Tool.
 2. Use the Zoom-In and Zoom-Out (Ctrl + Zoom-In) tools. Selecting an object makes it stay in the center of the Design Window while you zoom in or out.
-

At the right and at the bottom of the Design Window are scroll bars. Use them to scroll the view up, down, left, or right in the Design Window so you can see your level better.

6.4 Drag & Drop a Template onto the Design Window

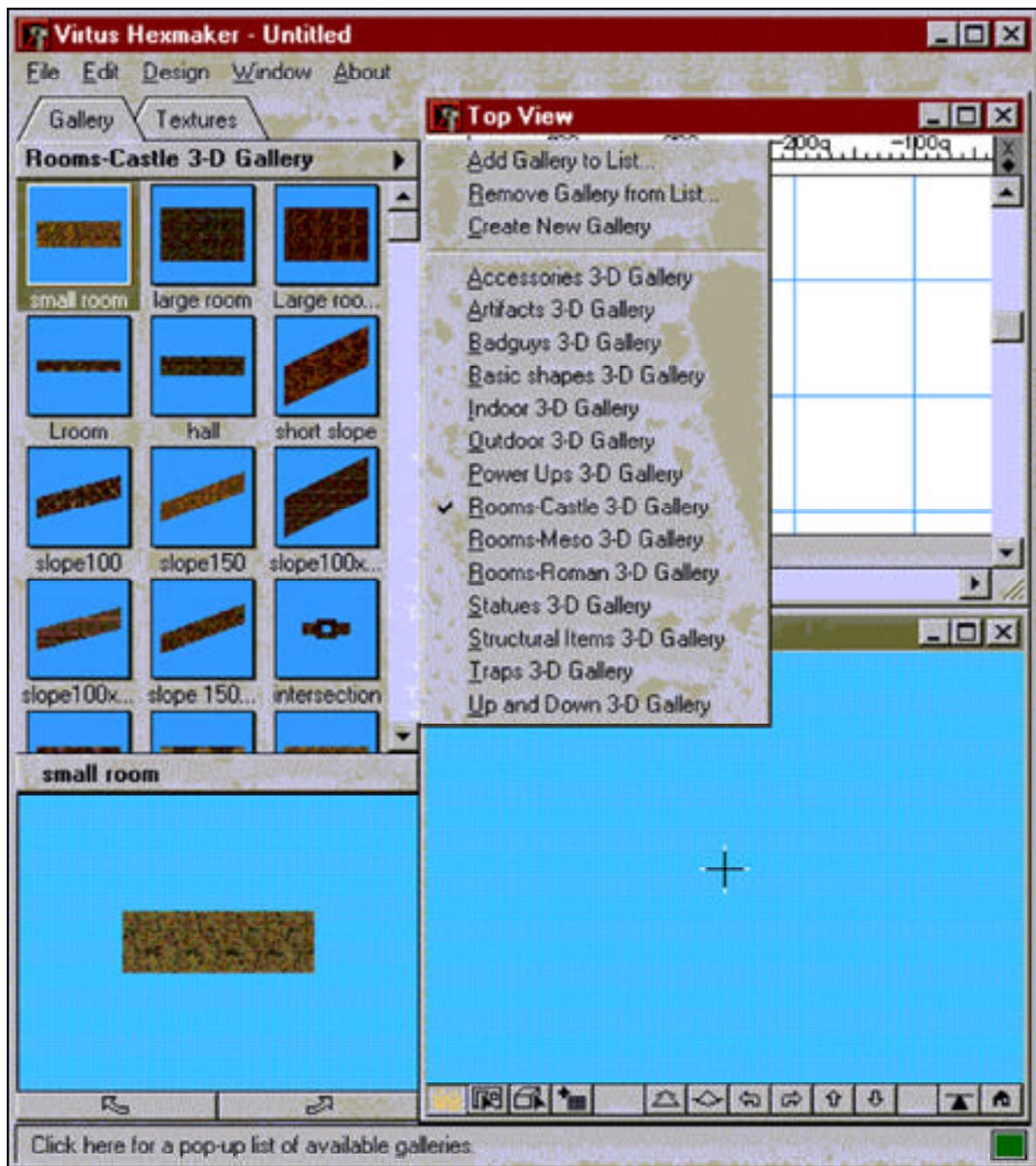
We provide ready-made rooms and hallway templates so you can build hassle-free levels. We're going to use several in "Building a Hexen II Level in 30 Minutes." Select the Gallery tab. At the top of the Gallery Window is an arrow pointing to the right. This is called the galleries drop-down arrow. Click the left mouse button on the arrow. A list appears. The items in the list are galleries holding templates and objects for building levels.

With the left mouse button, highlight and click on 30 Minute Level Gallery. The objects from this gallery will be added to your Gallery View.

In the Gallery View, click on 30 Minute Level to select it. If you want to get a better look at this level, you can look at it in the Preview Area at the bottom of the Gallery Window. Two buttons just below the Preview Area will let you rotate any object selected from the Gallery Window. Press either the left or the right rotation button to preview the template. When you select any object in Gallery View with your mouse cursor, you can see it in the Preview Area.

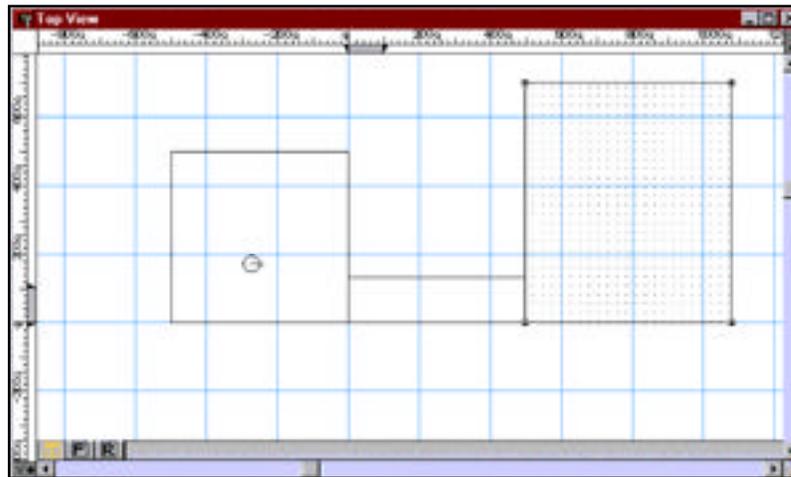
Select 30 Minute Level in the Gallery View by clicking and holding down the left mouse button. While still holding down the left mouse button, drag the template object to the right onto the Design Window's Top View. Release the mouse button in the middle of the Top View on the little circle (called the Observer). This action of selecting an object, moving it, and releasing the mouse button is called drag and drop. Drag and drop is one of the reasons Hexmaker is so easy to use in building a Hexen II level.

Note: Don't select the rooms or hallways in 30 Minute Level and move them around. The connections (or openings) between them will break.



Let's look at all of the parts of the 30 Minute Level template and give them names so they are easier to talk about without getting confused.

- Left Room: The room on the left.
- Right Room: The room on the right.
- Connecting Hallway: The hall connecting Left Room to Right Room.



The six middle buttons at the bottom of the Walk Window will help you to move the Observer around in the Design Window and walk through the template in the Walk Window. Of the six middle buttons, we'll use the four on the left, for now. Activate the Walk Window by clicking on it.



Try clicking and holding either of the two middle buttons (they look like arrows bent in the middle). They turn the Observer left or right, much like the rotation arrows at the bottom of the Preview Area of the Gallery Window. Notice that you see what the Observer sees.

As we mentioned, the Observer is located in the middle of the Design Window at coordinates 0,0. A line points from it out into the Top View. The direction this line is pointing in the Top View is the direction you can see within the Walk Window.

Try clicking and holding for a second or two, the two buttons to the left of the turn buttons. Watch what the Observer does in the Design Window when you use the Navigation buttons in the Walk Window. Use the Navigation buttons to move the Observer into the Hallway and on into the Right Room. Now, return the Observer to the bottom of the Left Room so it is looking into it.

6.5 Player Starting Position

To assign the player a starting position inside your level you need to : go to the Menu AMMO 3D GALLERY, open BARE NECESSITIES 3D GALERY, click on SINGLE PLAYER START or PLAYER DEATHMATCH START. Then DRAG & DROP the player to the DESIGN WINDOW where you want him to start.

6.6 Changing Textures

Make sure the Observer is in the Left Room so you can see changes in the room as we apply textures to its walls. Click on the Textures tab just like you clicked on the Gallery tab. The textures from the textures gallery appear in the Textures View. Try clicking on different textures and looking at their previews and descriptions in the Preview Area at the bottom of the Gallery Window.

Select the texture named *mtex411*. It appears in the Preview Area along with its name. Return to the Textures View. Drag the texture from the Textures View into the Walk Window and release it when the mouse cursor is over one of the Left Room's wall.

This is called applying a texture. Drag the texture to the other walls to apply textures to them, too. You will need to turn the Observer to see when you drop the texture on all the walls.

Use the four Navigation buttons to move the Observer around in the Walk Window and look at the walls, the ceiling, and the floor. Activate the Design Window and return to a good place to see the Left Room. Use the Zoom-Out Tool so you can see all of your level when you add Badguys and Power Ups.

6.7 Add Badguys and Power Ups

Select Gallery tab, select the galleries drop-down arrow, and select *Power Ups 3-D Gallery*. Power Ups appear in the Gallery View. Select *Healing Vial* and drag it to the Design Window's Top View into the middle of the Left Room. You can see it appear in the Walk Window.

Select *Level 2 Weapon*. Place it in the center of the Hallway.

Select *Breastplate* and place it in Left Room between *Healing Vial* and the corner.

Select *Yellow Scorpion* from the Badguys 3-D Gallery and place it in the middle of the Right Room. Select *Rat* and place one in Hallway near the entrance to Right Room.

Although Badguys and Power Ups appear from the Top View to be within the side walls of 30 Minute Level, they might be above the ceiling or below the floor. To see whether they are in the proper place in 30 Minute Level, change from Top View to Front View. Notice the T, F, and R buttons on the bottom of the Design Window at the left. **T** is for Top (the view you have been using from the beginning), **F** is for Front, and **R** is for Right. Left-click F to change to Front View.

Badguys and Power Ups appear in the Design Window with boxes around them. These boxes are called bounding boxes. On sloping surfaces, you don't want to place the bounding box outside of the sloping surface. Keep the entire box contained inside the level.

You can move the Badguys and the Power Ups. Just use drag and drop. Place your cursor (also called the Select Object Tool) in the middle of the object, hold down the left mouse, and move it. Release the mouse button when you are finished placing the object. Be careful to not place two objects too closely together, because you don't want them to overlap. Move them if necessary.

6.8 Save Your File

Go to the menu bar, select *File*, and click *Save*. The Save dialog appears. Enter *mylevel* as the name of your new level. Click *Save*.



6.9 Before Exporting Your New Level to Hexen II

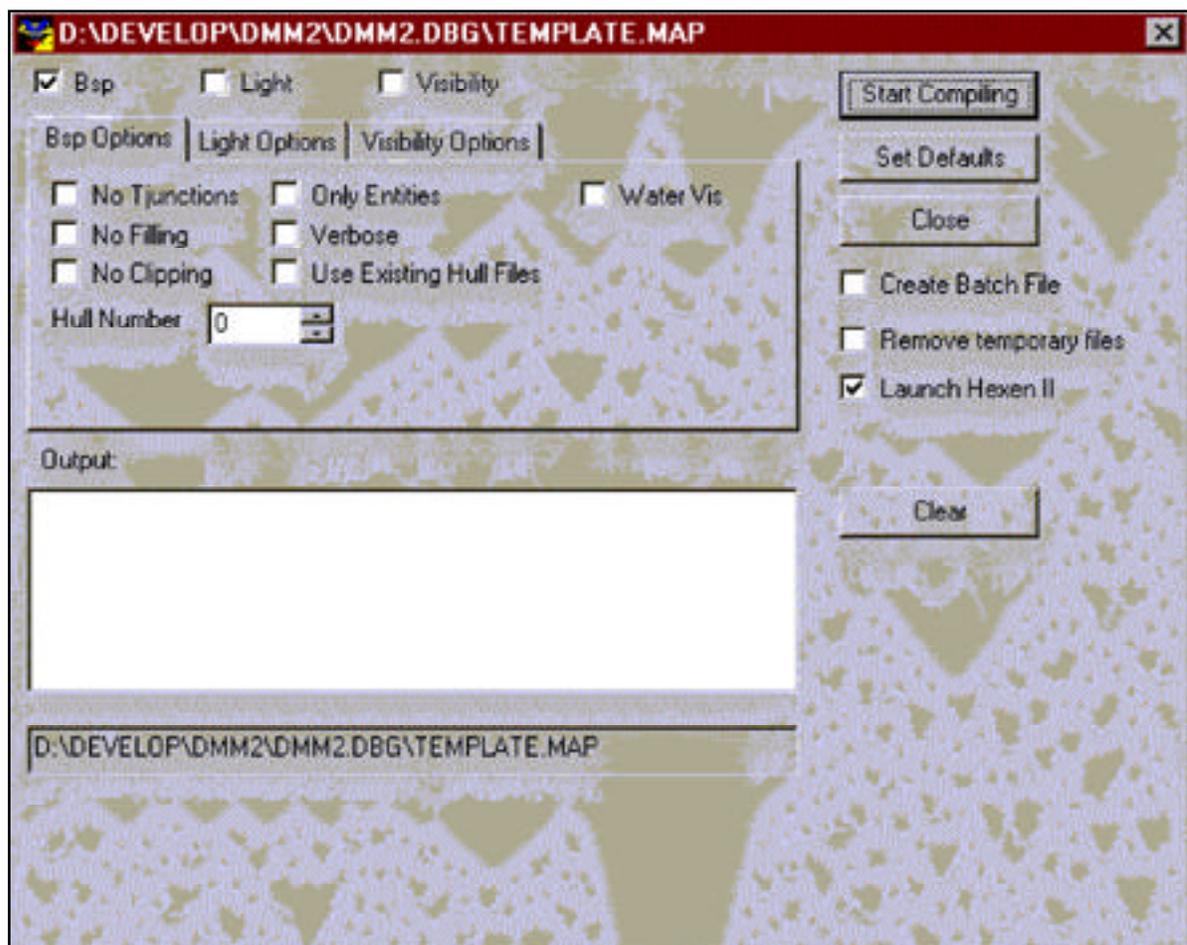
When you export your level to Hexen II, Hexen II places the player starting position at your last Observer position in Hexmaker. **Be certain** that:

1. The Observer position is inside your level and not outside of it.
2. The Observer is not inside or too near a Badguy, a wall, mana, and so forth.

Otherwise, this position is where the Hexen II player appears when the game starts. Consider placing the Observer in the lower-center of the Left Room so that the player has time to explore before being attacked by any Badguys. Beware: If the Observer is left outside of your level, when you export to Hexen II and start Hexen II, the player will be outside of the Hexen II level and cannot enter it.

6.10 Export Your New Level to Hexen II

Select *Hexen Export* from the File menu. The Export Hexen 2 Map File dialog appears. Click *OK*. A dialog shows you the progress of the export. A warning or two pops up. Ignore them and click *OK* in the appropriate boxes. The *Hexen Compilers* dialog will come up. Make sure that the check box at the top that says *Bsp* is checked and click *Start Compiling*. Some text will appear in the output window. Check that *Launch Hexen II* is checked and click the *Launch Hexen II* button. The final dialog appears asking if you want to close Hexmaker while you run Hexen II. Click *No*. Hexen II launches with your .map file, and you can play your level. Be ready before you enter the Hallway; Badguys are waiting. Close your copy of Hexen II before returning to Hexmaker.



6.11 Test Your Level in Hexen II

If you don't like the way your level looks in Hexen II, open the file `mylevel.hxm` in Hexmaker and make adjustments. Close Hexen II before you return to Hexmaker.

When you are finished, click *File* on the menu bar and the drop-down menu appears. Select *Close*. This closes the current Design Window so you can begin working on a new Hexen II level.

7. Using the Acrobat Reader

The Hexmaker manual is included on the CD in Adobe Acrobat format. If you haven't used Adobe Acrobat before now, here are a few tips to navigating your way through the documents.

The Acrobat Reader allows you to easily navigate through documents, search for words in the document, and jump from the table of contents to the area of interest using hyperlinks. The Acrobat buttons on the tool bar are there to help you jump from place to place within the documents:



The browse buttons advance the document to the first or last page of a document, or forward & back one page at a time.



Use the Go Back and Go Forward buttons to retrace your steps in a document, moving to each view in the order visited. Go Back also returns you to the original document after you click a link to another document.



The Actual Size button displays the page at 100 percent.



The Fit Page button scales the page to fit within the window.



The Fit Width button scales the page width to fill the width of the window.



The Find button searches for part of a word, a complete word, or multiple words in the current document only.

Additional help is available within the Acrobat Reader.

8. Product Support

Here's how to contact the Ubi Soft Entertainment support team.

If you contact us, please be prepared to give us the following information:

- Complete name of this product
- Version number on the CD-ROM, if any
- Specific details of the problem you're having
- Complete information on your computer system setup

Email: **techsupport@ubisoft.co.uk** *(best method)*

Telephone: 0171 944 9000

Fax: 0171 944 9300

Mail: Ubi Soft Entertainment Limited
 Attention: Support Department
 Vantage House
 1 Weir Road
 Wimbledon
 London
 SW19 8UX

Note: If there are any updates or bug fixes, they'll be posted on the Hexmaker Web site (<http://www.hexmaker.com>).
