

Hall

The Hall is a Bryce made set and it contains different parts so that a hall of any size can be assembled. It can only be used with the camera inside, the outside is not made to be rendered and there are no doors.

Introduction

This objects collection was made in March 2011 as a contribution for the Bryce DVD 2 along with two HDRIs. There were several artists contributing to the DVD but the project was never finished and published. In November 2014 the Hall was included in the set *DTE Terrains, HDRI and Hall* made with David Brinnen but Daz 3D declined the product.

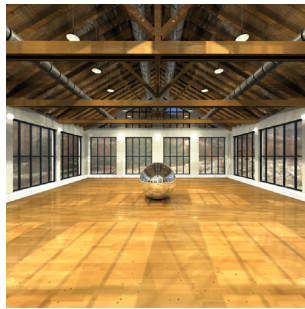
The Hall actually does not exist, only the parts to assemble it in whatever size needed. The interior is lit by ceiling lamps (spots) and wall lights (radials). The lights can be accessed via family colours to adjust the light, so can all parts to change the materials used.

Example Hall Sizes

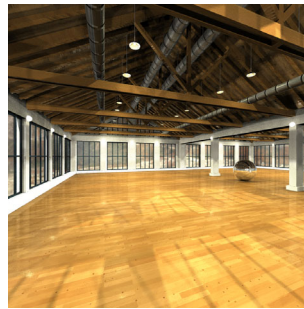
Below are four examples of different sizes. The camera FOV 112.5° is the same for all and is the equivalent of an 18 mm wide angle lens of a full frame (D)SLR photo camera.



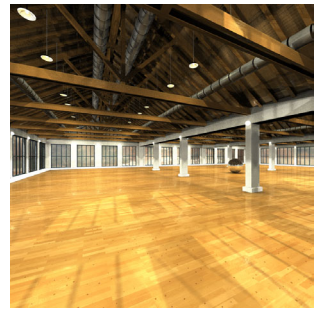
Narrow



Single



Double



Triple

Above at left the smallest hall with just two end parts turned sideways. Next to the right a normal or single sized hall with two end parts, one in the back of the camera and one in front. Between them three centre walls, two and a half visible.

The third is a double wide hall; each end part misses one side so they can be put together. The same is in the back of the camera. They are connected by twice three walls without one side wall and in between them twice two walls without windows on one side.

At far right a triple wide hall is shown. The left and right end part miss one side, the centre part both sides. They are connected by four sets without a wall on one side and in the middle without any wall, and three sets without windows on one side and in the centre without any windows.

If you wish, you can also assemble a quad wide hall or a quintuple wide hall and any number of walls with or without walls or windows.

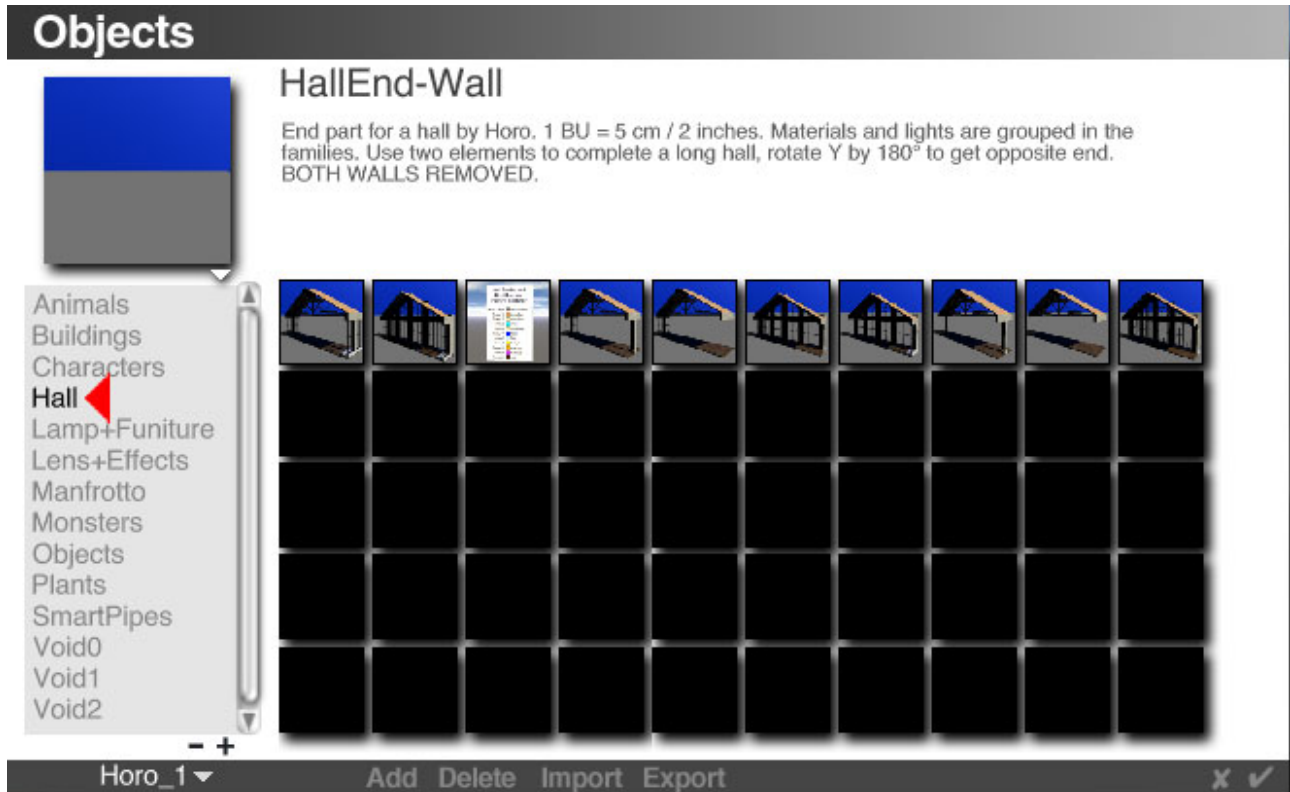
A side wall without windows on either or both sides still has the columns to support the roof and with a lamp on it. A side wall without walls on either or both sides has only the roof and the floor. In the third image above, where the mirror ball is would be a column if the corresponding wall had only the windows removed.

All parts are made with Bryce primitives and even a big hall does not use a lot of memory. Narrow 22 MB, Single 30 MB, Double 52 MB and Triple 83 MB; file sizes 8, 9, 10 and 11 MB.

The Hall Set

The set comes as an Object Library and must be copied into the correct folder. Example:

drive:\bryce\PRESETS\OBJECTS\subfolder\Hall.obp



To create a single wide hall, you need the first two objects only. For a double wide hall the four after the picture showing the families, for a triple or wider hall you need all nine objects. To swap left and right or front and back, just rotate the object by Y 180°.

Families, Sizes and Rotation

Families: The names given to a family are kept in a rendered file but once the object is saved to the library, the names disappear unfortunately and are replaced by the number. This is why the families with the number and names are included. Just select the object (a 2D-Face) and move it to a place where you can see it without disturbing the set up for the hall.

Through the families you can select all objects directly if you wish to change them, no matter how big your hall is. Particularly helpful is it to adjust the ceiling (spots) and wall lights (radials).

Sizes: The end and centre parts have a definite size, assumed that 1 BU (Bryce Unit) is 5 cm or 2 inches. Do not change the size of any object as long as you build up your hall. Once you have the hall complete, you can group and then resize it to fit your needs. Afterwards, it gets difficult to modify. This would also be the time to adjust the lights and materials.

Rotation: If you must rotate the hall, there are two materials that must be compensated for the rotation: Family 8 *Tiles* and Family 25 *Floor*. If you rotate the Hall Y by 30°, you must rotate the material on Channel A of the *Tiles* by Y -30° and *Floor* by Z -30° in the *Mat Lab — Transformation Tools — Rotate Control*; just in the opposite direction.

Hall Center and End Element Family Identifier	
Default Family	Default Family
Family 15	WoodDark
Family 10	WoodBright
Family 2	Glass
Family 9	WhitePaint
Family 17	Metal
Family 8	Tiles
Family 4	CeilingLight
Family 20	WallLight
Family 3	BulbGlass
Family 25	Floor

The two Main Parts



HallCenter – complete with walls and windows



HallEnd – complete with both walls

These are the first two objects in the library and have the names *HallCenter* and *HallEnd*. After the *HallFamilyIdentifier*, there are *HallCenter-Rwin* and *HallCenter-Rwall*. R means right, win window, and wall — you guessed it. Those are shown below.



HallCenter-Rwin



HallCenter-Rwall

The *HallCenter* objects are symmetrical so if you need the left wall or window removed, just rotate it by Y 180°. Removing the window keeps the wall column and the lamp on it, removing the wall removes window, column and lamp.



HallEnd-Rwall



HallEnd-Lwall

For the end part we need to remove either wall because we need to rotate the object Y 180° in order to use it at the opposite side and hence the missing walls also rotate. These are the objects six and seven.

The last three objects have the windows (*HallCenter-Win*) and the walls (*HallCenter-Wall*) removed for the centre part and both walls for the end part (*HallEnd-Wall*). These can be used as the centre part of a triple wide hall.

Assembling a Hall

I highly recommend using the Perspective camera, having all rotation angles at 0 and Origin X (left/right) at 0, Y (height above ground) as desired, e.g. 30 and Z (distance) again as desired, e.g. 0. Looking from above, the camera is looking straight to the top of the display. This makes it easy to assemble the parts for the hall.

Object Sizes

The width (X) of each object (*HallCenter*, *HallEnd*) looks a bit different but this is due to parts outside. The length (or depth, Z) is different for *HallCenter* and *HallEnd* parts. Again, forget the values shown in the [A]ttributes window of the object because of all the parts outside the hall that will not be visible from inside. Use these values:

HallCenter: X width: 205.00 BU (half 102.50 BU), Z length: 50.00 BU (half 25.00 BU).

HallEnd: X width: 205.00 BU (half 102.50 BU), Z length: 34.50 BU (half 17.25 BU).

Example Width:

For a single hall put the elements at $X = 0$ (centre).

For a double hall put the left elements at $X = -102.5$ and the right ones at $X = +102.5$.

For a triple hall start with the centre part at $X = 0$, add the left at $X = -205$ and the right $X = +205$.

Example Depth:

Put the back *HallEnd* at $Z = 7.25$, then add all *HallCenters* at 50, 100, 150, 200, 250, 300, ...

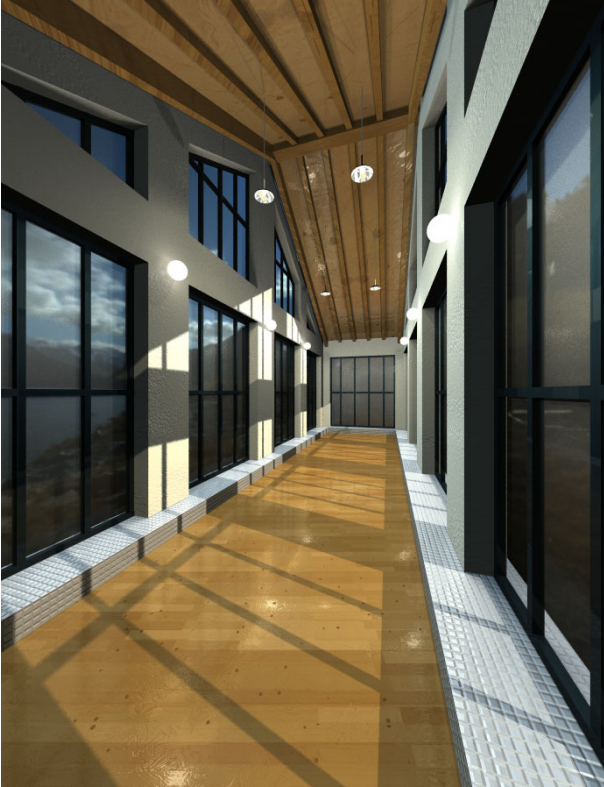
the *HallEnd* is at the last *HallCenter* + 25 + 17.25 = 42.25, in this example 300 + 42.25 = 342.25.

Lighting

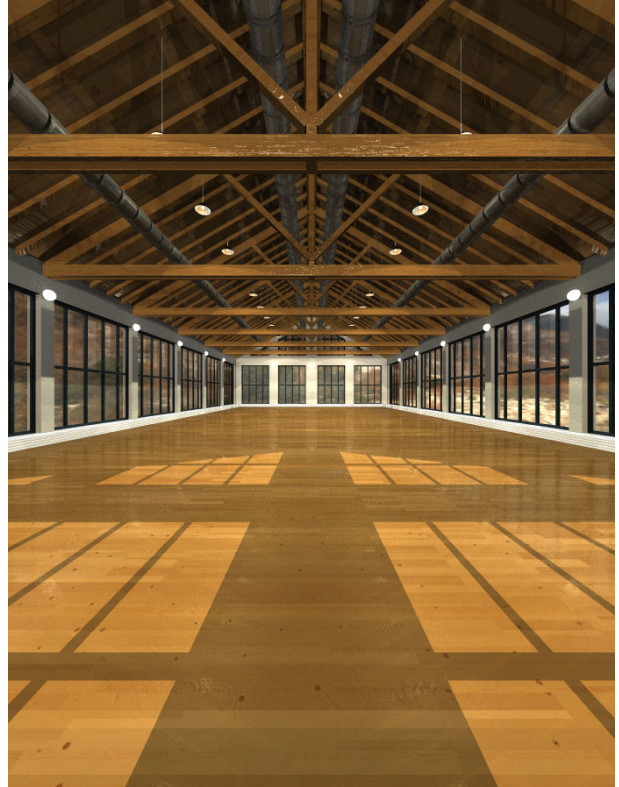
The spots on the ceiling have the settings as shown below. The radials at the walls have the same settings except for the *Spotlight Edge Softness*. *Diffuse* and *Specular* may be too bright at 10, you may want to decrease them to around 7. *Shadow Softness* is at zero, setting it to 5 and render *Premium* with *Soft Shadows* often gives a better result (and a longer render time).



Example: Assembled Halls



Narrow Hall, lit by the Marmorera HDRI.



Single Hall, lit by the Wasteland1A HDRI.



Double Hall



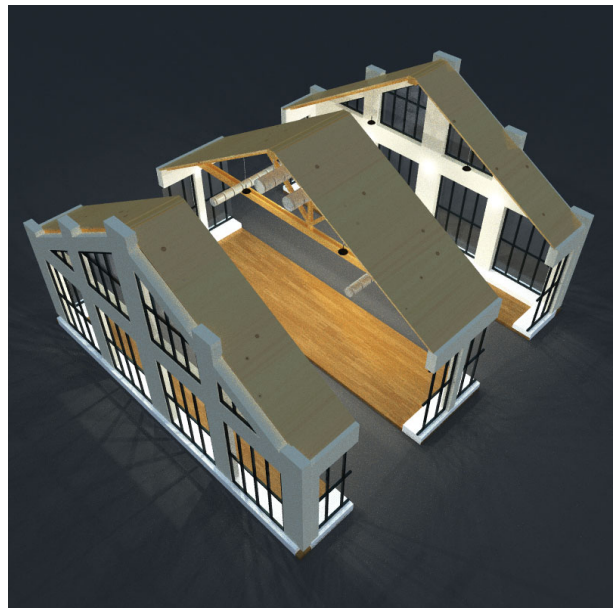
Triple or Huge Hall

Final Remarks

At right a *Single Hall* without the two *HallCenter* parts from above to show how the parts look from the — not very useful — outside.

Adjust lights and materials once the Hall is fully set up. Group it (make sure the ground plane is not selected) if you need to move it left around.

If you rotate it, do not forget to rotate the materials for the *Floor* and the *Tiles* — see at the end of page 2 — in the opposite direction. This is because these materials are mapped in *World Space*. If they were in *Object Space*, that would not be necessary — but if the Hall size is changed, the patterns will get all wrong.



Legal

This is a free set. You can use it as you wish, even give it away as long as it is free.

Author's Website: <https://horo.ch/>