

Burning Brazier with Particle Effects

The flame .tga images are Eshaktaar's.

The textures are from cgtextures.com, though I edited them a lot

Installation

Extract the obj and bitmap folders to your Thief folder. If you are using the built-in FM feature, extract them to your FMs folder (e.g. Thief2\FMs\StreetsOfDeath\)

The obj\txt16 folder contains a couple of .mtl files. These are used to fix a rendering problem.

Setting up in Dromed

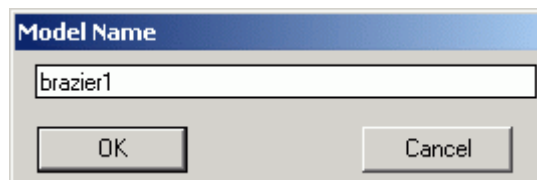
Brazier

To create the brazier, find the Extinguishable archetype and either create it in your mission or make a new archetype under it called 'brazier'. The latter is recommended, especially if you intend to use the particle effects.

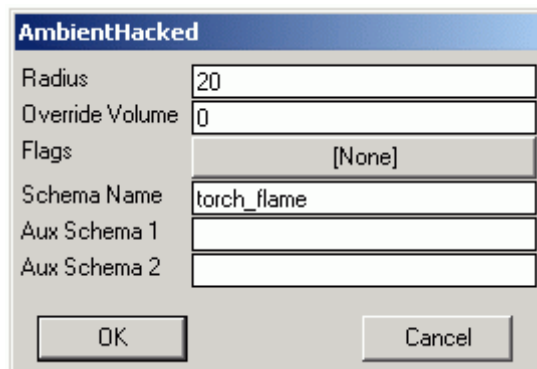
Do not create it under 'torch' or anything else that has the Tweq > Models property.

Add/edit the following properties:

Shape > Model Name:

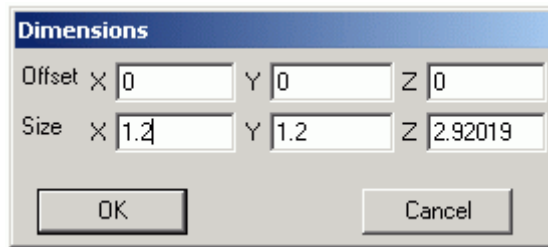


A > Ambient Hacked:



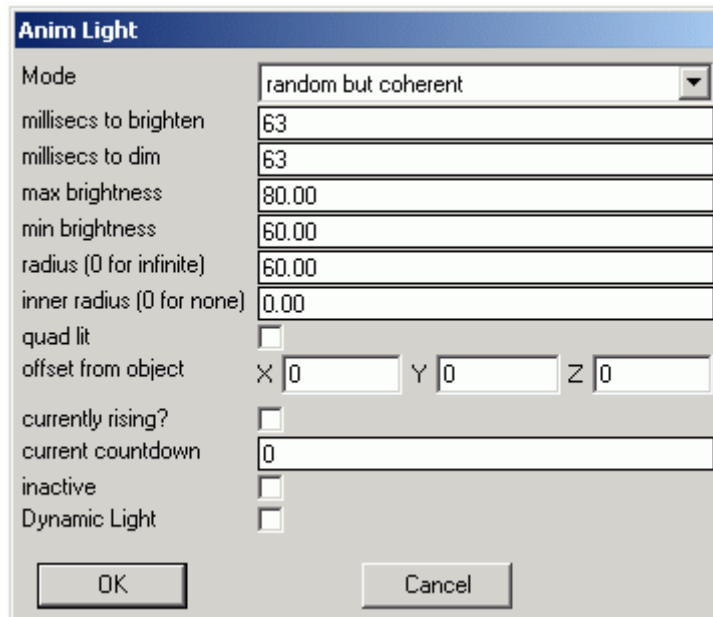
(You could also use fire_flame, which is louder)

Physics > Model > Dimensions:



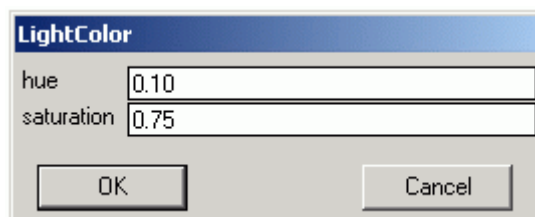
(This helps the cuboid model work better with the cylindrical object)
(Physics > Model > Type will be automatically added once you've done this)

Renderer > AnimLight:



(If you don't like 'random but coherent', choose 'maximum brightness' instead)

Renderer > Light Color:



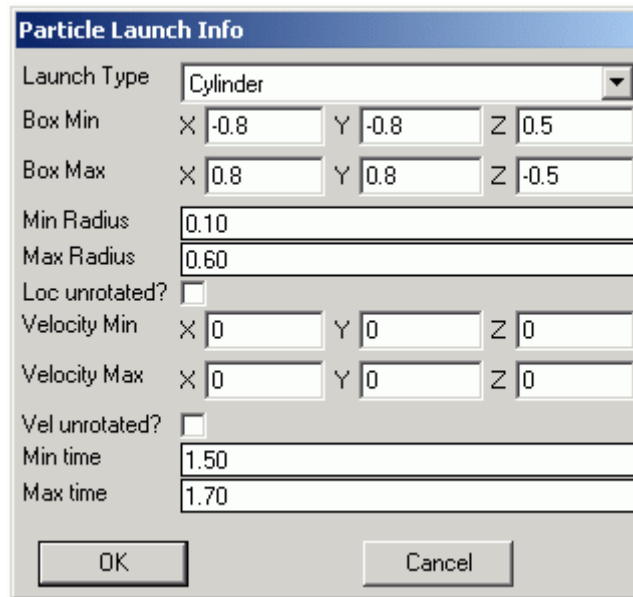
(This gives it the same red-orange colour as torches)

Particle Effects

Flames

Go to the FireParticleFX archetype. Either create it in the mission or make a child archetype called BrazierFire.

Add the property SFX > Particle Launch Info:



The image shows a 'Particle Launch Info' dialog box with the following fields and values:

Field	Value
Launch Type	Cylinder
Box Min X	-0.8
Box Min Y	-0.8
Box Min Z	0.5
Box Max X	0.8
Box Max Y	0.8
Box Max Z	-0.5
Min Radius	0.10
Max Radius	0.60
Loc unrotated?	☐
Velocity Min X	0
Velocity Min Y	0
Velocity Min Z	0
Velocity Max X	0
Velocity Max Y	0
Velocity Max Z	0
Vel unrotated?	☐
Min time	1.50
Max time	1.70

Buttons: OK, Cancel

(The X and Y values are for Box Min and Box Max don't matter, because the Launch Type is 'Cylinder')

SFX > Particles:

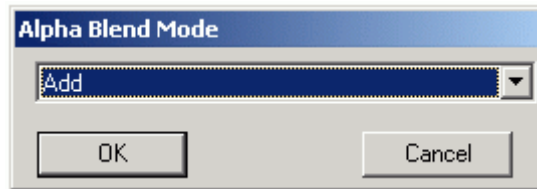
Particles	
Active	☒
Particle Render Type	Bitmap disk
Particle Animation	Launched continually
Particle Group Motion	Attached to object
number of particles	320
size of particle	0.20
bitmap name	pfire
velocity	X 0 Y 0 Z 0
gravity vector	X 0 Y 0 Z 1.5
color (palettized)	188
2nd color	0
3rd color	0
alpha	90
fixed-group radius	0.02
spin / pulse group	☐
spin speed	X 0 Y 0 Z 0
pulse magnitude	0.00
pulse cycle time ms	0
particle fade time	0.20
launch period	0.02
animation offset ms	0
Group-scale velocity	0.00
bm-disk flags	Fade-in at Birth, Grow-in at Birth, Random St...
bm-disk birth time	0.40
bm-disk rot (vel, offs, rand)	X 2 Y 5 Z 6
bm-disk ani frame time	0.50
bm-disk grow speed	0.40
bm-disk rgb	(0 , 0 , 0) 
bm-disk 2nd rgb	(0 , 0 , 0) 
bm-disk 3rd rgb	(0 , 0 , 0) 
always simulate (slow)	☐
always simulate group	☐
sort particles (slow)	☐
particles start launched	☒
alpha subpixel particles	☐
skip subpixel particles	☐
ignore attachment refs	☐
force matching unrefs	☐
OK Cancel	

(Bitmap disk is a NewDark feature)

bm-disk flags:



Renderer > Alpha Blend Mode:



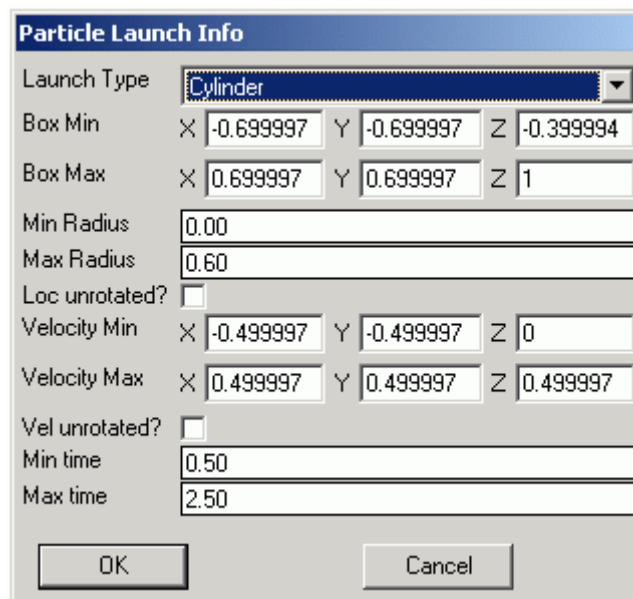
(This makes the flame look brighter, especially when to particles overlap)

Sparks

I made a very simple spark image (The spk images in bitmap).

Create a FlameSparx object, or make a child archetype called BrazierSparks.

SFX > Particle Launch Info:



SFX > Particles:

Particles	
Active	☒
Particle Render Type	Scaled bitmap
Particle Animation	Launched continually
Particle Group Motion	Attached to object
number of particles	12
size of particle	0.01
bitmap name	spk
velocity	X 0 Y 0 Z 0
gravity vector	X 0 Y 0 Z 1.5
color (palettized)	185
2nd color	0
3rd color	0
alpha	0
fixed-group radius	0.00
spin / pulse group	☐
spin speed	X 0 Y 0 Z 0
pulse magnitude	0.00
pulse cycle time ms	0
particle fade time	0.00
launch period	0.00
animation offset ms	0
Group-scale velocity	0.00
bm-disk flags	[None]
bm-disk birth time	0.00
bm-disk rot (vel, offs, rand)	X 0 Y 0 Z 0
bm-disk ani frame time	0.00
bm-disk grow speed	0.00
bm-disk rgb	(0 , 0 , 0) 
bm-disk 2nd rgb	(0 , 0 , 0) 
bm-disk 3rd rgb	(0 , 0 , 0) 
always simulate (slow)	☐
always simulate group	☐
sort particles (slow)	☒
particles start launched	☒
alpha subpixel particles	☐
skip subpixel particles	☐
ignore attachment refs	☐
force matching unrefs	☐
OK Cancel	

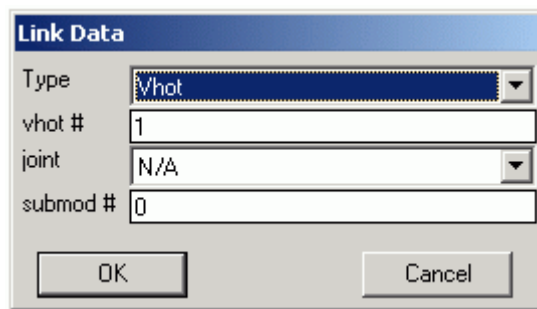
Renderer > Alpha Blend Mode:

Alpha Blend Mode	
Add	
OK Cancel	

Linking the Particles

To connect a particle effect to the brazier, give each particle effect a

ParticleAttachment link to the brazier, with the following link data:



The 'Link Data' dialog box contains the following fields:

- Type: Vhot
- vhot #: 1
- joint: N/A
- submod #: 0

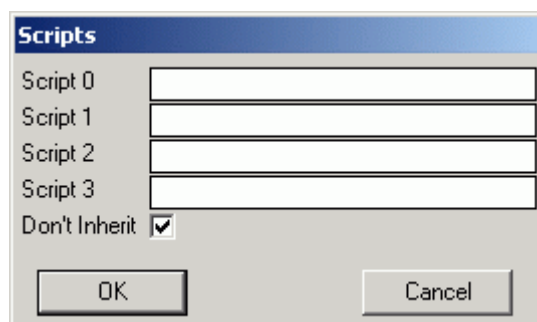
Buttons: OK, Cancel

As well as the flames and the sparks, some smoke looks nice too. I think FireplaceSmoke is already adequate so I haven't made custom effect.

Looking at the links in the brazier archetype should give you something like this:

Links: Brazier (-7030) --[~ParticleAttachement]--> Any				
ID	Flavor	From	To	Data
FBE00001	~ParticleAttache...	Brazier (-7030)	BrazierFire (-7031)	{ Vhot; 1; N/A; 0 }
FBE00039	~ParticleAttache...	Brazier (-7030)	BrazierSparks (-7032)	{ Vhot; 1; N/A; 0 }
FBE0003A	~ParticleAttache...	Brazier (-7030)	FireplaceSmoke (-4821)	{ Vhot; 1; N/A; 0 }

If you don't want it to be extinguishable, use a different section of the hierarchy, or add a blank S > Scripts property:



The 'Scripts' dialog box contains the following fields:

- Script 0: [Empty text box]
- Script 1: [Empty text box]
- Script 2: [Empty text box]
- Script 3: [Empty text box]
- Don't Inherit: ☒

Buttons: OK, Cancel

R Soul