# **Destructible Sprite**

This component allows you to make sprites destructible.

#### Alpha Tex

This allows you to set the alpha texture for your sprite. By default, this should probably match the alpha channel of your main sprite, but it will gradually change as you damage the sprite.

NOTE: If you set this field to None (i.e. null), then the alpha data will be automatically copied from the main sprite.

NOTE: Only the alpha channel is read.

# **Density Tex**

This allows you to set the density texture. A density texture tells D2D how solid each pixel in the **Alpha Tex** is. For example: if you set the Density Tex to be a 50% transparent image, then you will need to use double the amount of explosions to cause the same amount of damage to your sprite.

NOTE: Only the alpha channel is read.

#### **Sharpness**

This allows you to set how sharp the transparency edge is.

#### Indestructible

This allows you to disable stamp damage on this sprite, but still allow fracturing

#### **Binary**

This setting causes the alpha texture to use point filtering, which is useful if you don't want smooth edges.

#### Split Depth

This allows you to see how many times this sprite has been split.

### Min Split Pixels

This allows you to set how many pixels are required for a split to be considered valid. For example, if you set this to 100 and you chip off a tiny part of a large sprite, then that won't be counted as a valid split. This is important because increasing the split depth changes how other features (e.g. fracturing behaves).

#### Solid Pixel Count

This allows you to see how many solid pixels remain in the sprite.

# **Original Solid Pixel Count**

This allows you to see how many solid pixels were in the sprite before you began destroying it.

# **Solid Pixel Ratio**

This allows you to see how much % (0..1) os the original sprite remains.

# [MESSAGE] OnAlphaTexModified( D2D\_Rect rect )

When a sprite is modified (e.g. stamped or sliced), this message will get broadcast on the sprite, and all children.

# [MESSAGE] OnAlphaTexReplaced()

When a sprite is replaced, this message will get broadcast on the sprite, and all children.

# [MESSAGE] OnDestructibleValidSplit( D2D\_SplitData splitData )

When a sprite is split and its pixel count is satisfied, this will get broadcast on the sprite, and all children. The splitData class contains all information about the split.

NOTE: splitData is static, so you must copy the data over if you want to store it.

#### [CONTEXT] Blur + Halve + Sharpen Alpha Tex

This blurs the Alpha Tex, Halves its resolution, and doubles the sharpness. This is very useful if you want to speed your game up, but don't mind losing a little bit of collider accuracy.

# [CONTEXT] Recalculate Original Solid Pixel Count

If you've modified your AlphaTex and want to use that as the original, then you can call this to reset the original solid pixel count.

# [CONTEXT] Add Fixture

If you want to quickly add a fixture to your sprite, then click this. Read the documentation of Fixtures for more information.

# [CONTEXT] Add Auto Collider

If you want to add an auto collider to your sprite, then click this.

### [CONTEXT] Add Polygon Collider

If you want to add a polygon collider to your sprite, then click this.

# [CONTEXT] Add Edge Collider

If you want to add an edge collider to your sprite, then click this.

#### [CONTEXT] Add Quad Fracturer

If you want to add a quad fracturer to your sprite, then click this.

#### [CONTEXT] Make Splittable

If you want your sprite split into multiple separate GameObjects when split by destruction, then add this.

#### [CONTEXT] Make Detachable

If you want your sprite to go from static to dynamic after it's been broken from all pinned fixtures, then add this.

#### [CONTEXT] Make Swappable

If you want your sprite to change texture as it takes damage, then add this.