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# DecimateModifier(Modifier)

base classes — [bpy\\_struct](#), [Modifier](#)

**class** bpy.types.**DecimateModifier**(**Modifier**)

Decimation modifier

## **angle\_limit**

Only dissolve angles below this (planar only)

### **TYPE:**

float in [0, 3.14159], default 0.0872665

## **decimate\_type**

- `COLLAPSE` Collapse – Use edge collapsing.
- `UNSUBDIV` Un-Subdivide – Use un-subdivide face reduction.
- `DISSOLVE` Planar – Dissolve geometry to form planar polygons.

### **TYPE:**

enum in ['COLLAPSE', 'UNSUBDIV', 'DISSOLVE'], default 'COLLAPSE'

## **delimit**

Limit merging geometry

### **TYPE:**

enum set in [Mesh Delimit Mode Items](#), default {'NORMAL'}

## **face\_count**

The current number of faces in the decimated mesh

### **TYPE:**

int in [-inf, inf], default 0, (readonly)

## **invert\_vertex\_group**

Invert vertex group influence (collapse only)

### **TYPE:**

boolean, default False

## **iterations**

Number of times reduce the geometry (unsubdivide only)

### **TYPE:**

int in [0, 32767], default 0

## **ratio**

Ratio of triangles to reduce to (collapse only)

### **TYPE:**

float in [0, 1], default 1.0

## **symmetry\_axis**

Axis of symmetry

### **TYPE:**

enum in [Axis Xyz Items](#), default 'X'

### **use\_collapse\_triangulate**

Keep triangulated faces resulting from decimation (collapse only)

#### **TYPE:**

boolean, default False

### **use\_dissolve\_boundaries**

Dissolve all vertices in between face boundaries (planar only)

#### **TYPE:**

boolean, default False

### **use\_symmetry**

Maintain symmetry on an axis

#### **TYPE:**

boolean, default False

### **vertex\_group**

Vertex group name (collapse only)

#### **TYPE:**

string, default "", (never None)

### **vertex\_group\_factor**

Vertex group strength

#### **TYPE:**

float in [0, 1000], default 1.0

### **classmethod bl\_rna\_get\_subclass(id, default=None)**

#### **PARAMETERS:**

**id** (*str*) – The RNA type identifier.

#### **RETURNS:**

The RNA type or default when not found.

#### **RETURN TYPE:**

`bpy.types.Struct` subclass

### **classmethod bl\_rna\_get\_subclass\_py(id, default=None)**

#### **PARAMETERS:**

**id** (*str*) – The RNA type identifier.

#### **RETURNS:**

The class or default when not found.

#### **RETURN TYPE:**

type

## **Inherited Properties**

- `bpy_struct.id_data`
- `Modifier.name`
- `Modifier.type`
- `Modifier.show viewport`
- `Modifier.show_expanded`
- `Modifier.is_active`
- `Modifier.use_pin_to_last`
- `Modifier.is override data`

- `Modifier.show_render`
- `Modifier.use_apply_on_spline`
- `Modifier.show_in_editmode`
- `Modifier.execution_time`
- `Modifier.show_on_cage`
- `Modifier.persistent_uid`

## Inherited Functions

- `bpy_struct.as_pointer`
- `bpy_struct.driver_add`
- `bpy_struct.driver_remove`
- `bpy_struct.get`
- `bpy_struct.id_properties_clear`
- `bpy_struct.id_properties_ensure`
- `bpy_struct.id_properties_ui`
- `bpy_struct.is_property_hidden`
- `bpy_struct.is_property_overridable_library`
- `bpy_struct.is_property_readonly`
- `bpy_struct.is_property_set`
- `bpy_struct.items`
- `bpy_struct.keyframe_delete`
- `bpy_struct.keyframe_insert`
- `bpy_struct.keys`
- `bpy_struct.path_from_id`
- `bpy_struct.path_resolve`
- `bpy_struct.pop`
- `bpy_struct.property_overridable_library_set`
- `bpy_struct.property_unset`
- `bpy_struct.type_recast`
- `bpy_struct.values`
- `Modifier.bl_rna_get_subclass`
- `Modifier.bl_rna_get_subclass_py`