

UltraBodysuit for Genesis 2 Female(s)

Users Guide Version 1.3



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Introduction

The UltraBodysuit for DAZ 3D's Genesis 2 Female(s) is the most advanced and versatile suit of its type yet created. This guide is presented to give you information on the suit to allow you to utilize it to its fullest potential.

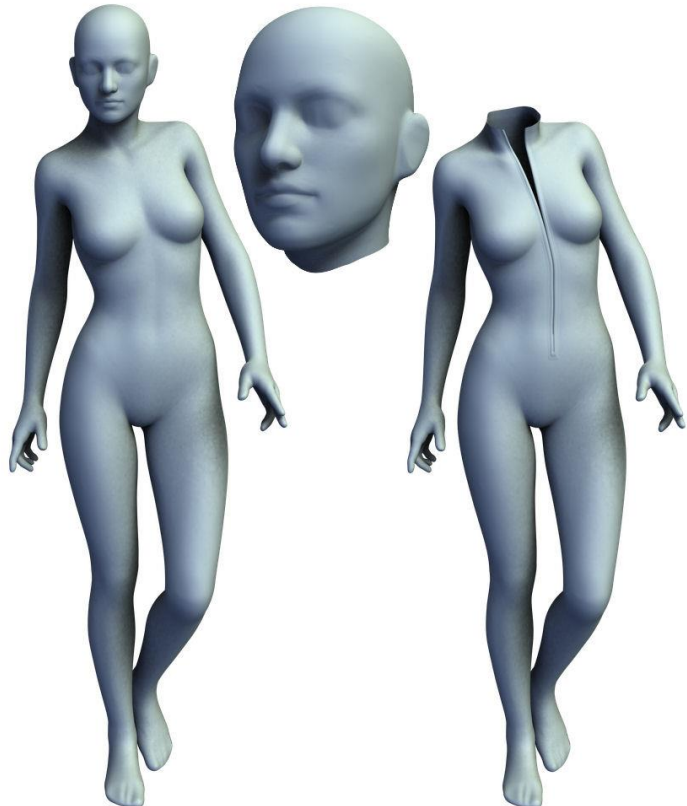
The suits included a number of user requests gained from almost a year's worth of discussions in DAZ 3D's Commons forum. My thanks to all those who participated, it is because of you that this suit contains cutting-edge features and functionality!

The suit come as a set of 5 different objects built from one master suit. First there are two versions of the full bodysuit with cowl, (UltraCatsuit). The UltraCatsuit comes with over 316 different material surfaces that include different materials for the left and right side of the body for greater versatility. The streamlined version has a reduced number of material zones for when simplicity is required.

Next there is a version of the bodysuit without the head, making it similar to the much beloved Victoria 4 Bodysuit. This version also includes extra morphs to simulate unzipping the front of the suit. The final separate object is a cowl which can be used when only head portion of the suit is needed.

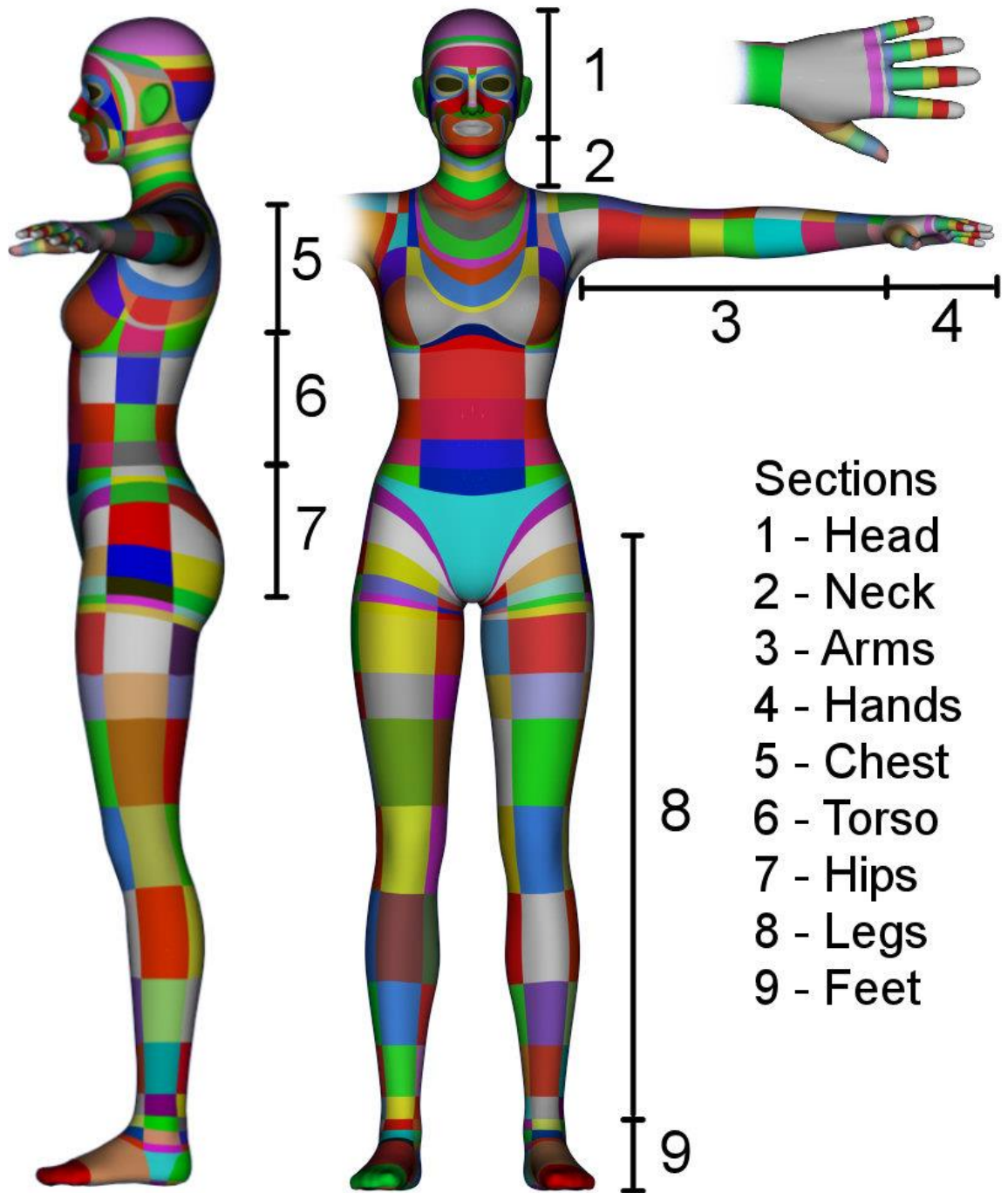
The UltraCatsuit comes with over 148 different regular morphs including morphs for popular characters such as Victoria 6 and Aiko 6. Also included are morphs to create different masks, clothing styles and well as a full range of adjustment morphs. The suit also has 163 HD Morphs to allow for even more customization and to simulate elements like seams and wrinkles.

The suits come with three main different UV texture map options. The default UV map has the whole bodysuit on one map; this makes it easy to use tiling textures. The second map has a separate map for the head so it will be easier for people to create hi-resolution textures of just the head. The body section is the same as the first map. The third texture is compatible with the V4 bodysuit. Textures created for DAZ 3D's [Victoria 4.2 Bodysuit](#) can be manually applied to the bodysuit using the compatible UV map, material names are different so presets will not work. There are several UV maps, based on the default map, that have been relaxed to look better on characters such as Aiko 6, The Girl 6, etc.

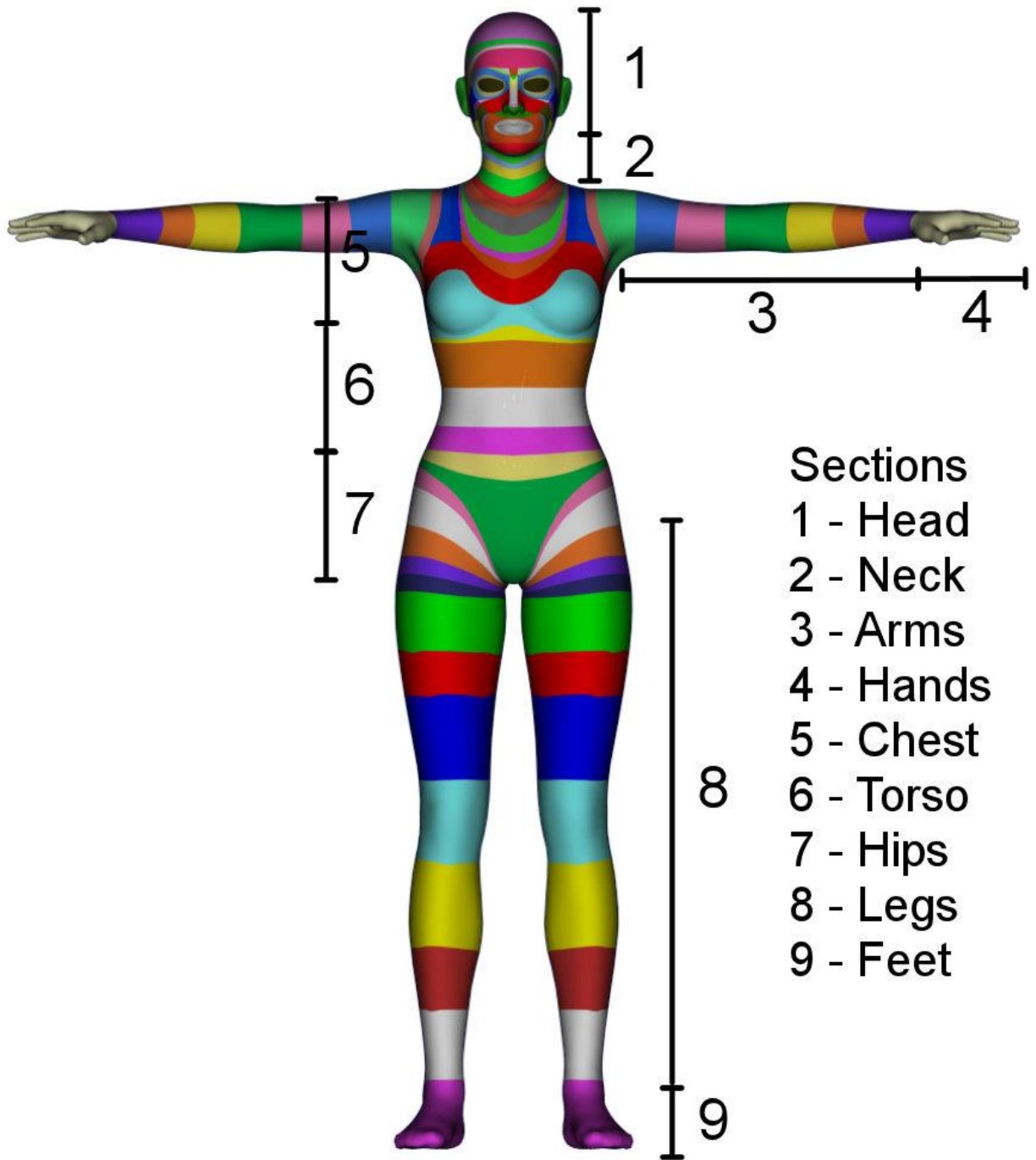


Surface Materials

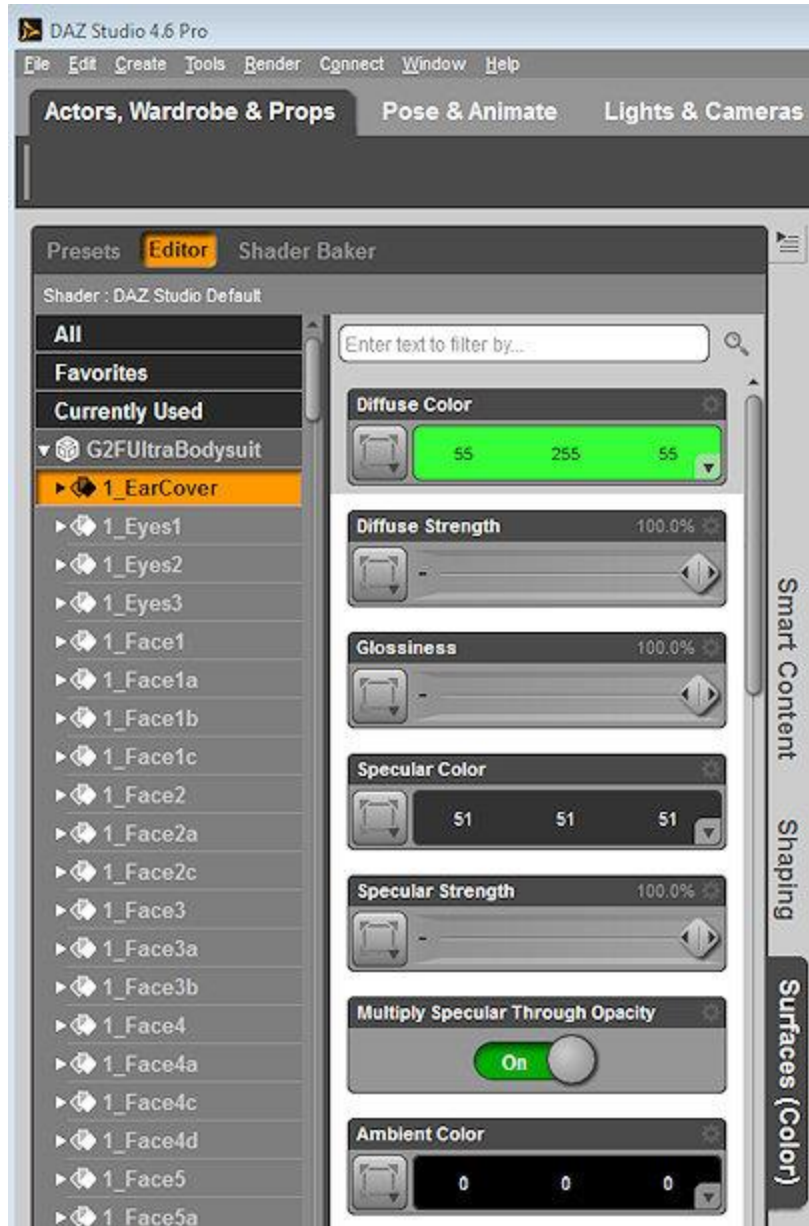
The default bodysuit has 316 different surface materials! These include different material names for the left and right so the arms and legs can be managed independently on each side. Material names are grouped into sections for naming purposes. The figure below shows how the sections map to the bodysuit, (i.e. 1 to the head, 2 to the neck, etc.).



Based on user requests the bodysuit also comes with a version that has fewer materials zones (101). This makes it easier for those who want to do simple outfits or for those who find all the zones in the full version too tedious. The UV map options are the same. Both versions of the suit share material names therefore a large number of the presets for the full version will work with the simplified material version.



The material naming convention was adopted so that areas of the bodysuit are grouped together in the Surfaces (Color) tab, (see below). This helps when using the Surfaces tab to select multiple groups. In the face and head sections small materials are grouped together by adding an alpha numeric suffix, (i.e. 1_Face1, 1_Face1a, 1_Face1B, etc.). The left and right sides of the arm and leg sections are further denoted by adding _Lft or _Rt suffixes to the names.



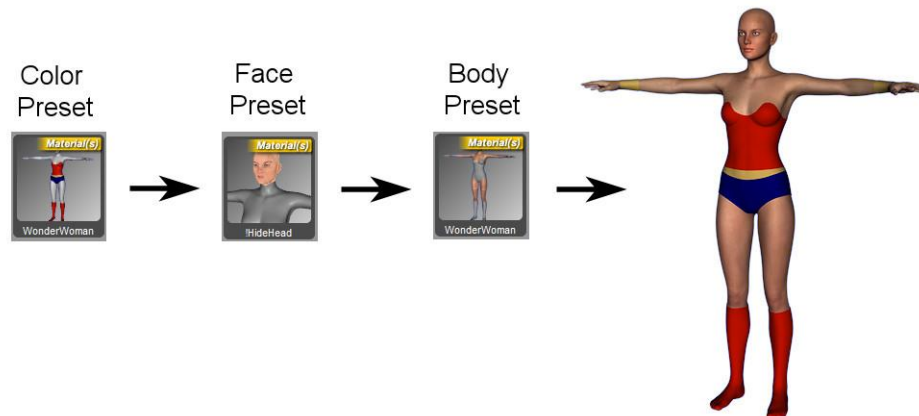
Presets

The ultra-bodysuit comes with a large number of material presets to make it easier for the user to create a wide variety of outfits. It only takes a few clicks of the mouse to create a bikini, shorts, tank top, etc.



The presets can be found in the Materials folders under the Content Library tab. The Body and Face are designed to be applied to the figure with all surfaces visible. When a Body or Face preset is applied it will hide the surfaces to give the desired look.

Generally to use the presets you want to apply your textures or materials-color preset first. Then apply the appropriate preset to hide the required material surfaces. Below is an example of how to use the presets to create a Super Heroine style outfit out of the bodysuit.



Color Presets

There are a number of presets that just change the surface diffuse color. These allow you to easily turn the bodysuit into things like simple superhero outfits. Some of the presets are designed to be used with a Body Preset to hide some of the surfaces to complete the outfit.

Body Presets

The suit comes with 60 presets for the body. These presets will only affect the surface on the body, except one. The preset !Default will reset ALL surfaces to be visible, neutral grey color. The preset !DefaultBody will only affect the body surfaces.

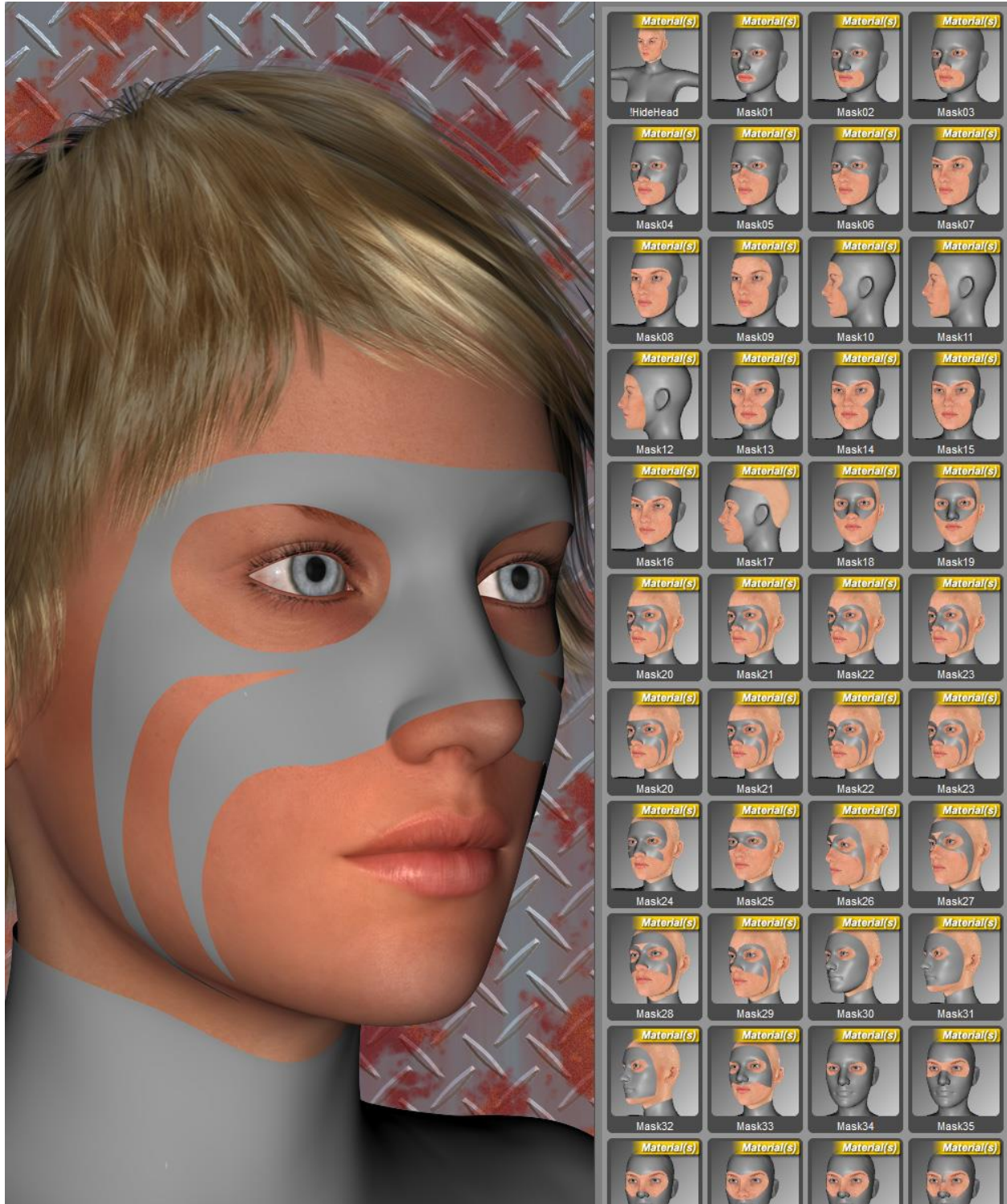
Face Presets

The suit comes with 71 presets for the face. The presets are designed to work with all the face surfaces visible.

Sample body presets



Sample face presets



Morphs

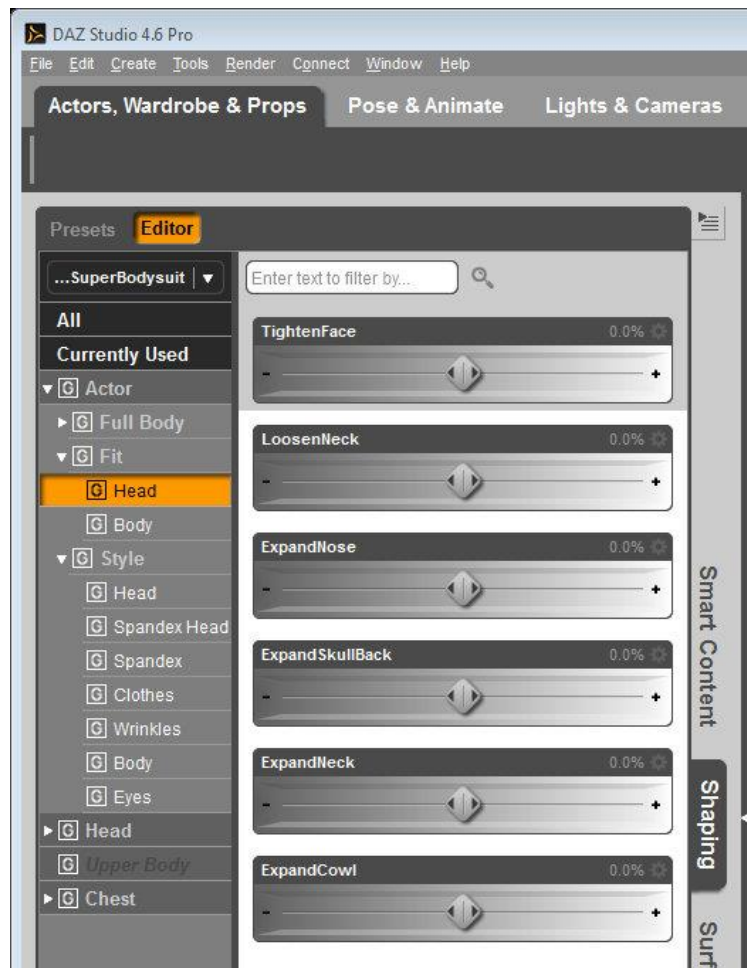
The suit comes with over 148 different morphs including morphs for popular characters such as Victoria 6 and Aiko 6. The user morphs can be accessed through the Shaping tab on the Actors, Wardrobe & Props page or the Parameters tab for the selected item in DAZ Studio.

There are two main groups, Fit and Style. The Fit group contains morphs that loosen or tighten various parts of the suit to help with poke through, etc. The Style group contains a wide range of morphs to create different looks for the bodysuit.

Spandex

The Spandex group contains a number of morphs to create a spandex look around the breasts. Separate morphs for a number of the different breast shaping morphs were created. For example, if using the BreastsShape01 morph you would use the SpandexBreastsShape01 to create a spandex look. There are also morphs to give the area between the glutes a spandex look. In addition, a few character specific morphs were created as well.

Some spandex morphs may produce slight odd shading due to how some of the polygons are laid out, particularly where a vertex has more than four attached to it. The polygons were laid out to maximize surface materials and in some areas geometry is less than optimal for morphs. If this is a problem then changing the SubDivision Algorithm from Catmull to Catmull-Clark (Legacy) can help. However, if you do this then the HDMorphs may not work.





Clothes

Some of the morphs, particularly some of the clothes morphs were designed to look their best when the feet or hand material zones are hidden. For example the Pants morph should have the feet material hidden as it is intended to have an open cuff look. The Jumpsuit morphs look best when the feet and hand material zones are hidden. Presets in the Materials-Body are included for this purpose.

HD Morphs

The bodysuits come with numerous HD Morphs for additional detailing and customization. A large number of the morphs are used to simulate seams and other fabric effects. Please note that HD Morphs normally only show their full effect at render time and usually only display partial effects in preview mode.

Note, ChestStretchSPDX morph is a utility morph that was designed to be used with the regular spandex chest morphs and actually pushes the vertices in. This is why there is poke through when you apply it at 100% just by itself. By default the limit is set to 60%.

Some of the HD morphs only affect some of the polygons on the top of neck (for example Neck1bSeam). Without close inspection it may look like there is no morph there. These were left in to help when matching the corresponding HD morph in the Cowl when both items are used together.

Fabric Effects

Normally fabric effects like wrinkles and stretching are handled using displacement maps to simulate these effects. Also for specific clothing items they can be modeled into the mesh. A general use item, like the UltraCatsuit, the placement of the polygons to facilitate the large number of surface materials makes modeling in the fabric effects difficult. In addition this would drastic increase the polygon count. However, with the ability to add HD Morphs to Genesis 2 figures it is now possible to use morphs to simulate some of these effects.

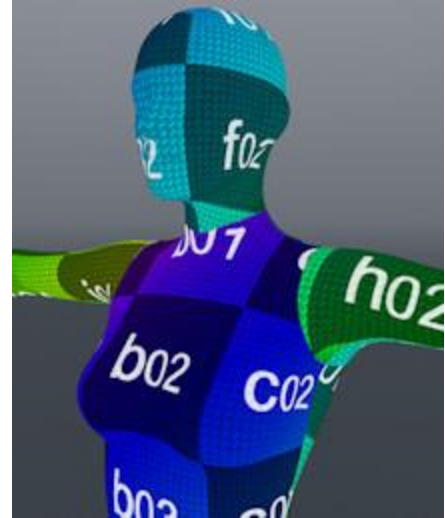
A set of specific morphs where created to simulate wrinkles around most of the major joints. This is useful when using textures sets that do not include displacement maps for this specific purpose.



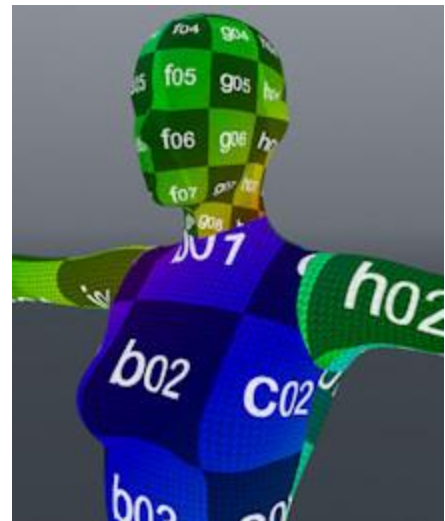
UV Texture Maps

The bodysuit comes with a number of different UV maps to give texture artists some flexibility when making textures to select the UV map that best fits the textures they are making. The maps can be selected from the UV Set section in the Surfaces tab in DAZ Studio.

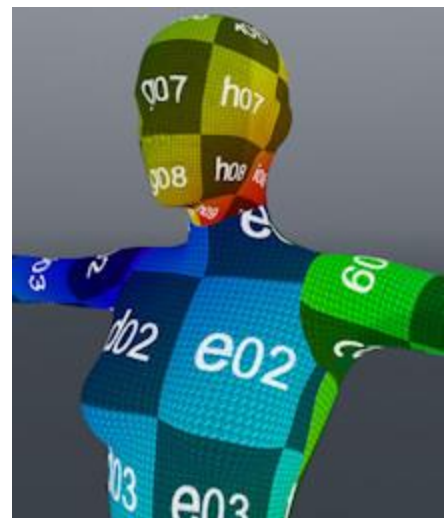
The default UV map has the whole bodysuit on one map; this makes it easy to use tiling textures. The V4 Bodysuit had some stretching in certain areas and this is eliminated with this map.



The default UV map with hi-resolution head has a separate map for the head. This is so it will be easier for people to create hi-resolution textures of just the head. The body section is the same as the first map.



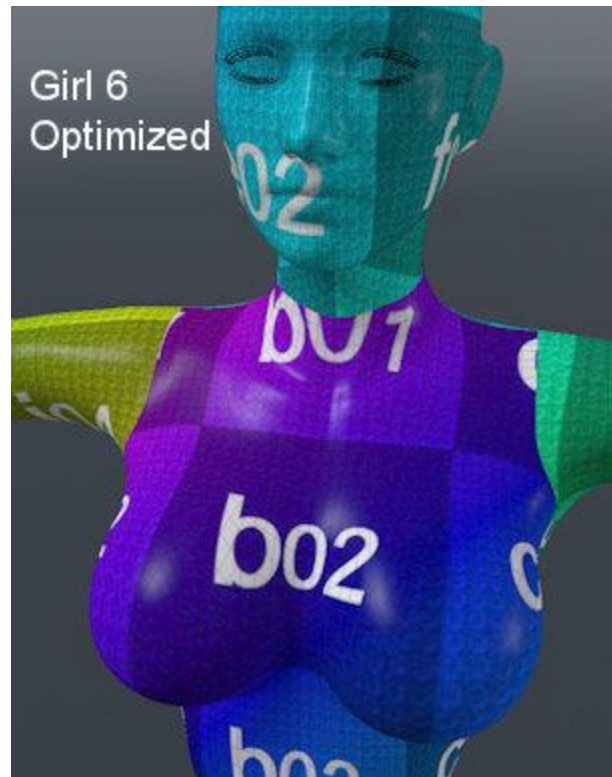
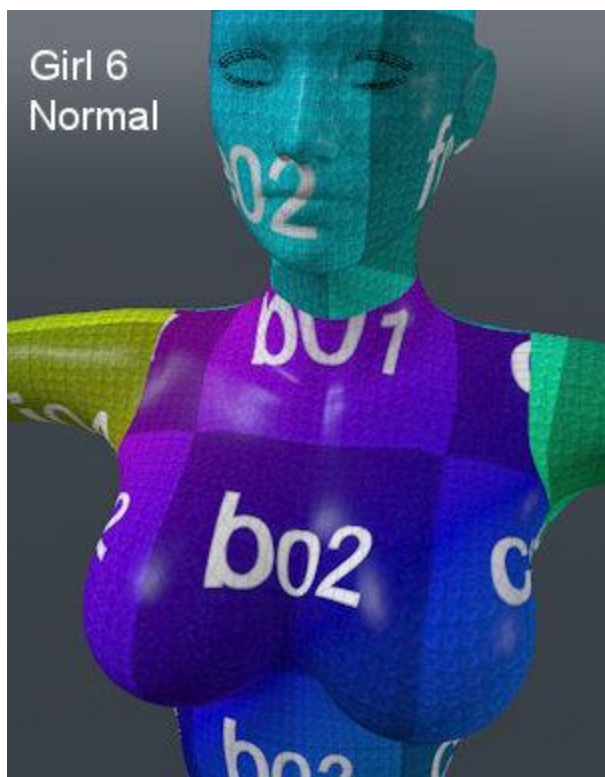
The V4Bodysuit texture is compatible with the V4 bodysuit. The head and hands are compatible with the cowl and hand portion of the gloves that came with the V4 Bodysuit.



Character Specific Maps

Additional UV texture maps were created from the default normal map for some of the Genesis 2 female figures. This was done not to necessarily fix stretching, (i.e. breast area), as this would require cutting up the UV map further, but to relax the map so it behaves more like the normal map. Some textures may look a little better using one of these alternate UV maps.

Below is the The Girl 6 figure with the normal map and with the optimized map.

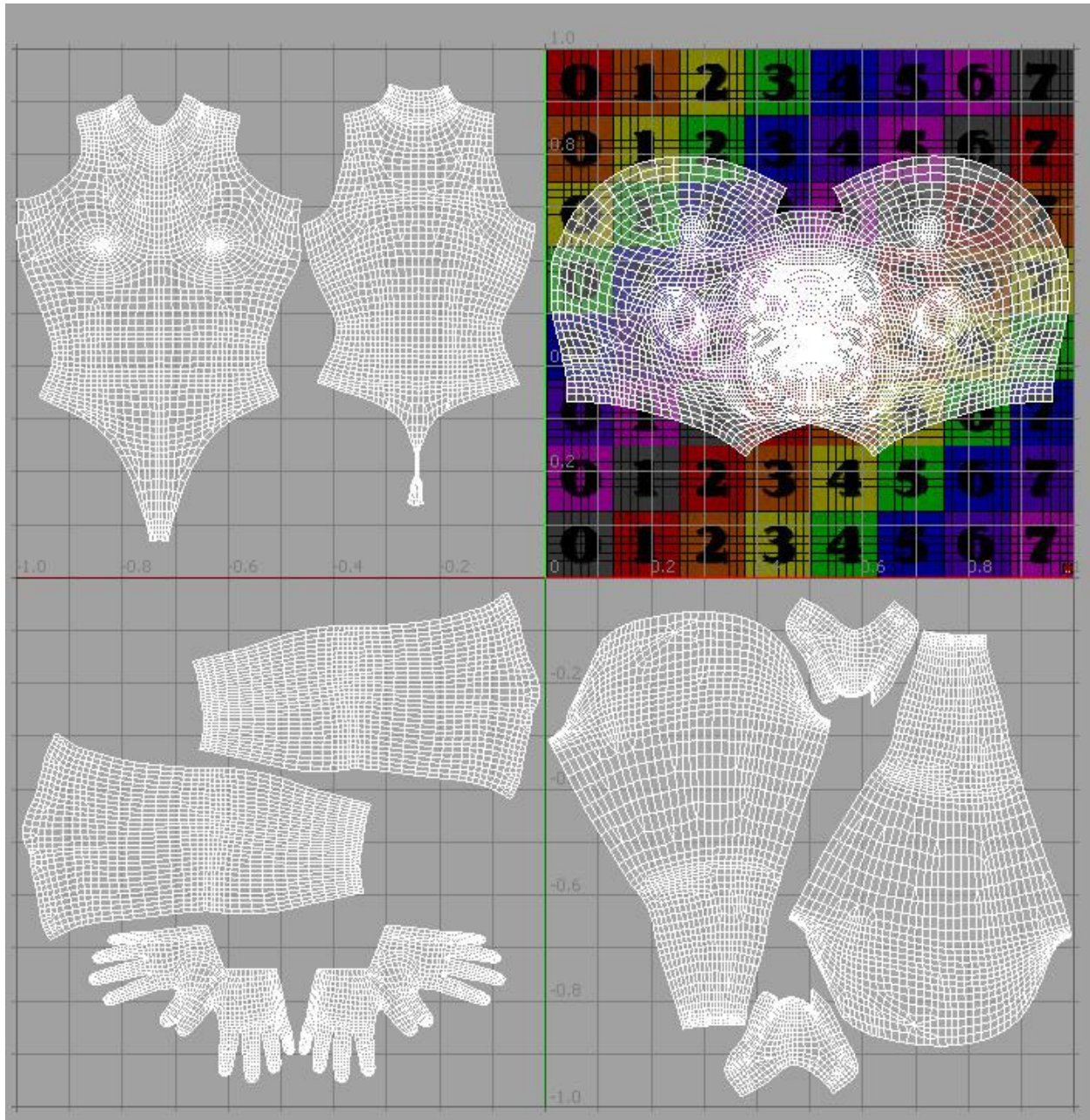


Additional character maps include:

- Big Breasts Alternate (reduces stretching in the chest area)
- Aiko 6 Body Optimized
- The Girl 6 Body Optimized
- Victoria 6 Body Optimized

HD UV Map

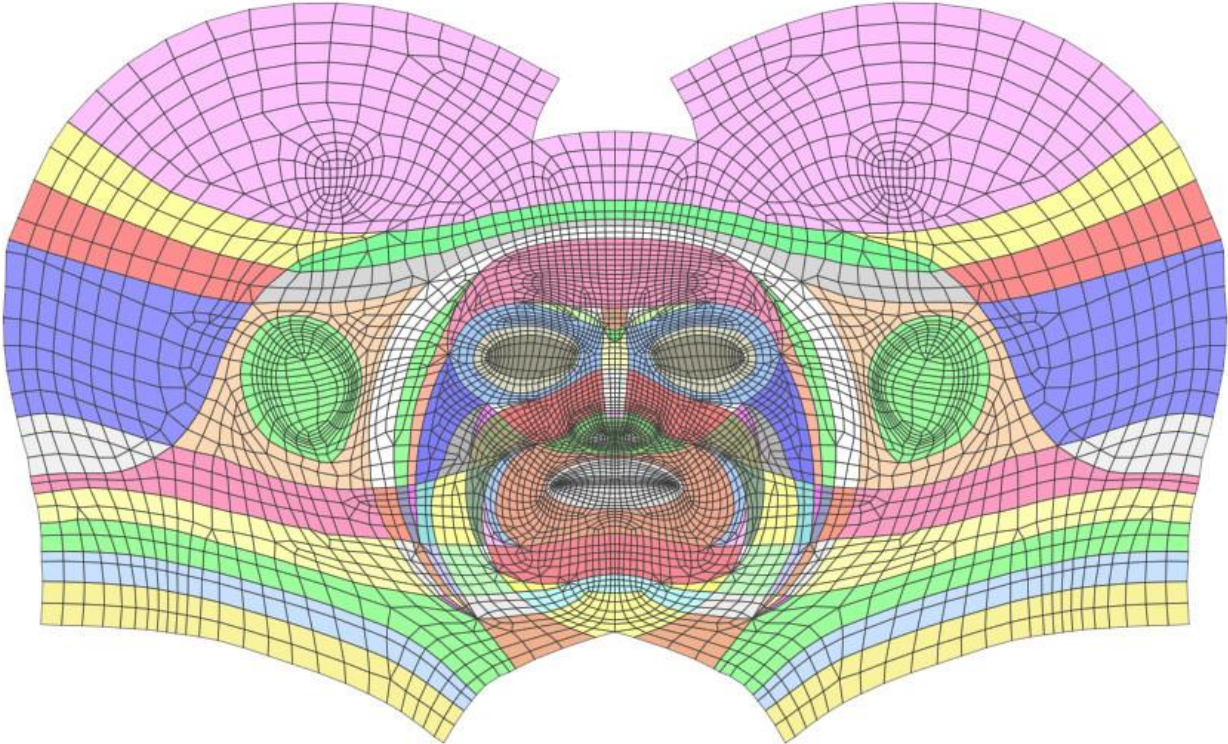
An additional map is also included that maximizes different body sections in order to provide the highest resolution maps possible. However this would mean for the complete bodysuit four different maps would be required. This mapping was created mostly for artists looking to use a portion of the bodysuit, for example using just the legs to create stockings or hosiery.



Below is the default UV map for the bodysuit with the various material zones highlighted in different colors.



The Hi-resolution face version is the same as the default version except the head now takes up a large portion of the UV map.



Layering Clothing over the Bodysuit

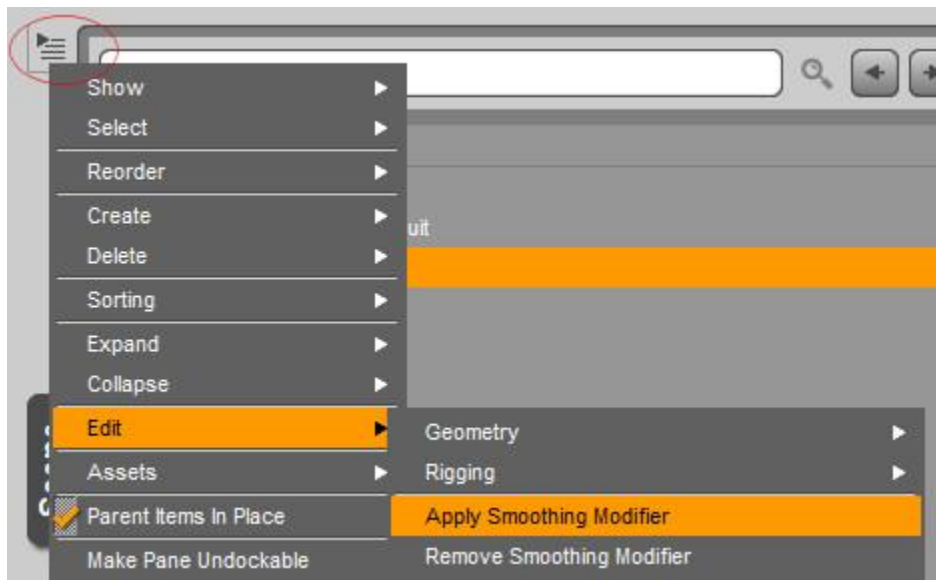
Though the bodysuit is extremely versatile there will be cases where you will want to layer other clothing items over it. Fortunately it is easy to add items like boots, jackets, etc. over the bodysuit in DAZ Studio.

In this example I have conformed the bodysuit and the TreadZ for Genesis to the Genesis 2 Female. If no other action is taken then portions of the bodysuit poke through the boots, as can be seen in the image to the right. Now it is possible to use the expansion morphs in the TreadZ to correct this. However, not all clothing items have the needed expansion morphs to correct the poke through. An alternate way to correct this is to use the Smoothing Modifier in DAZ Studio.

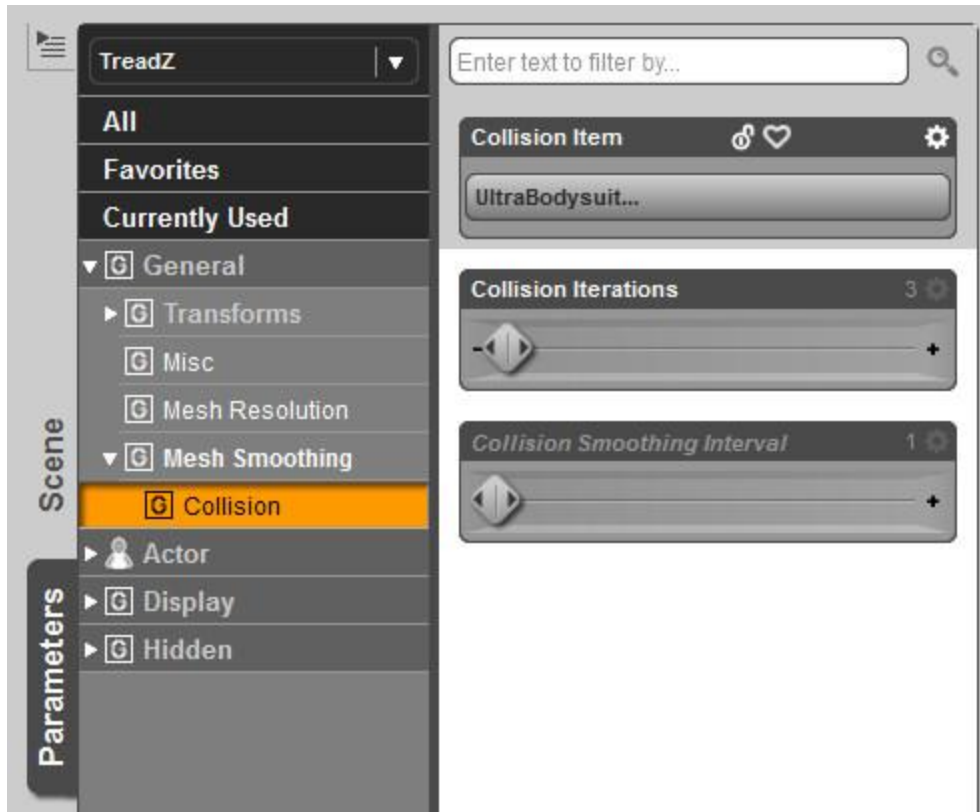


First in the Scene tab select the item to be layered over the bodysuit, in this instance it is the TreadZ.

Next select the active pane options menu, (circled in red) and follow the tree to Edit and the Apply Smoothing Modifier.



Next on the Parameters tab select Mesh Smoothing and then Collision

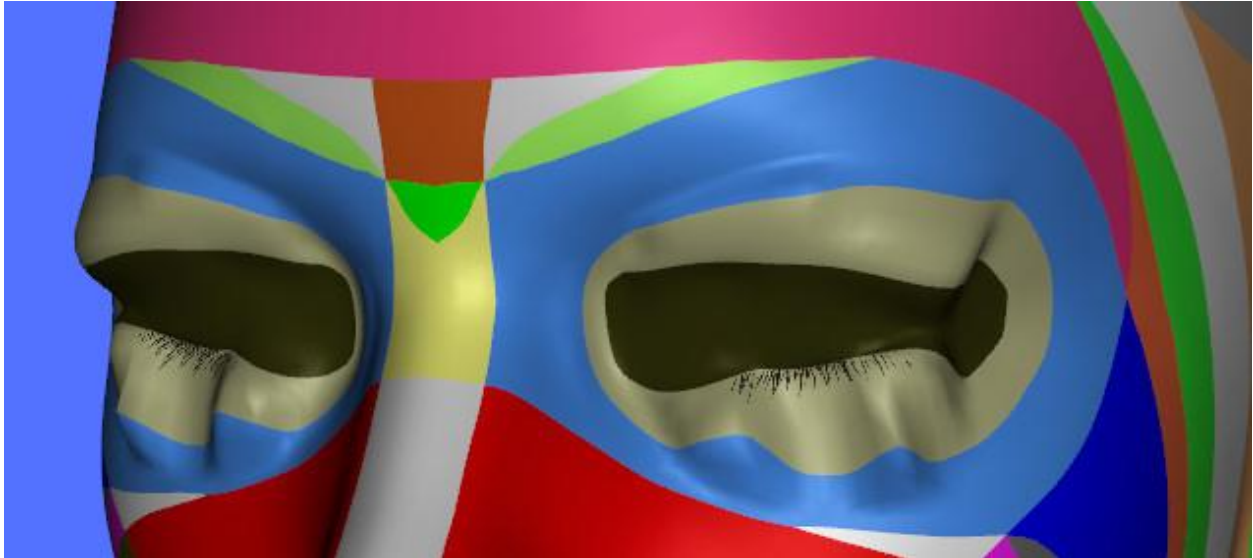


Now from the Collision item drop down menu select the bodysuit and the poke-through disappears.

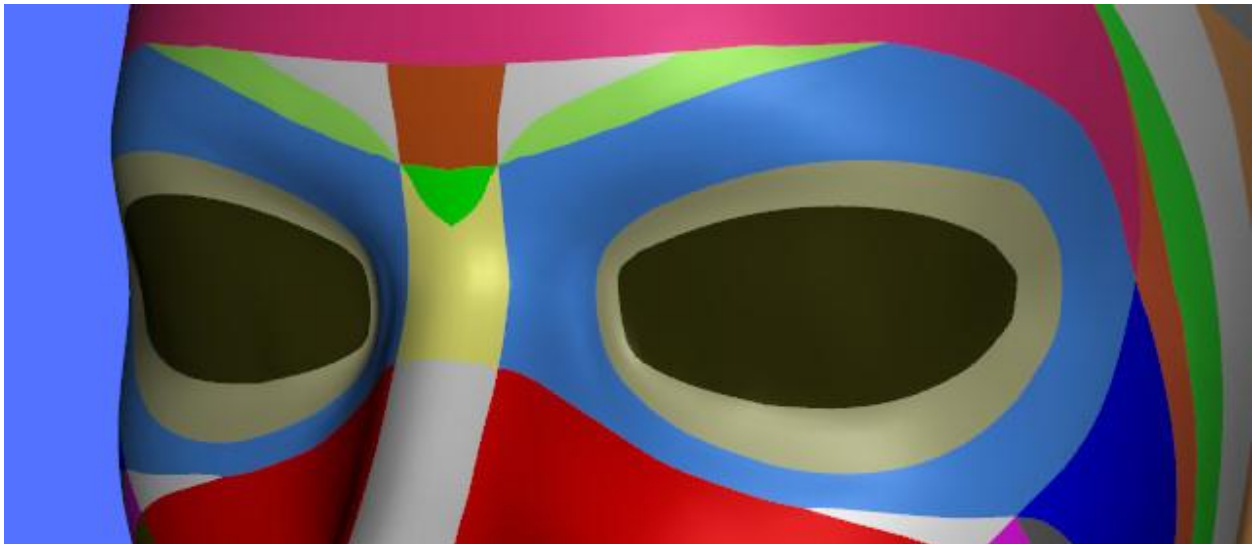


Polygon Smoothing

Polygon smoothing can be used to help auto-generated morphs look better. However, there is an issue with the eyes when using polygon smoothing. The eyelash polygons cause the eyes of the bodysuit to crunch.



Ideally it would be best if the eyelash polygons could be excluded from the automorph calculations. However, currently there is no way to eliminate the influence of select polygons in DAZ Studio. A work around for this was created by including an EyeLashIn morph on both the suit and Genesis 2 Female(s). By moving the eyelashes into the skull on the Genesis 2 Female character they no longer affect smoothing.



Reference

Morphs

These are all the standard morph in the main figure (UltraCatsuit). Not all these morphs are in the other figures (Cowl or Bodysuit) due to differences in geometry, (i.e. a Cowl has no hands so no hand morphs). The UltraBodysuit has extra morphs to open the front of the suit.

| Main Folder | Sub Folder | Morphs |
|-------------|---------------|---------------------|
| Hidden | Actor Support | FBMAiko6 |
| | | FBMGiaBody |
| Fit | Head | FBMGirl6 |
| | | FBMLilith6 |
| Fit | Head | FBMMeiLin6 |
| | | FBMOlympia |
| Fit | Head | FBMStephanie6 |
| | | FBMVictoria6Body |
| Fit | Head | FBMVoluptuous |
| | | FHMAiko6 |
| Fit | Head | FHMGiaHead |
| | | FHMGirl6 |
| Fit | Head | FHMLilith6 |
| | | FHMMeiLin6 |
| Fit | Head | FHMOlympia |
| | | FHMStephanie6 |
| Fit | Head | FHMVictoria6Head |
| | | CTRLBreastsImplants |
| Fit | Head | CTRLBreastsNatural |
| | | PBMBreastsCleavage |
| Fit | Head | PBMBreastsHeavy |
| | | PBMBreastsShape01 |
| Fit | Head | PBMBreastsShape02 |
| | | PBMBreastsShape03 |
| Fit | Head | PBMBreastsShape04 |
| | | PBMBreastsShape05 |
| Fit | Head | PBMBreastsShape06 |
| | | PBMBreastsShape07 |
| Fit | Head | PBMBreastsShape08 |
| | | TightenFace |
| Fit | Head | LoosenNeck |
| | | ExpandNose |
| Fit | Head | ExpandSkullBack |
| | | ExpandNeck |

Body

ExpandCowl
ExpandHeadSide
RaiseTopHead1
RaiseTopHead2

ExpandAll
ExpandLftHands
ExpandRtHands
ExpandLowerBack1
ExpandLowerBack2
ExpandLowerBack3
LoosenAbs
LoosenButtocks1
LoosenButtocks2
LoosenChest1
LoosenChest2
LoosenChest3
LoosenFeet
LoosenGroin1
LoosenGroin2
LoosenHips1
LoosenHips2
LoosenKnees
LoosenLftArm
LoosenLftLeg
LoosenLftShldr
LoosenRtArm
LoosenRtLeg
LoosenRtShldr
LoosenLftShin
LoosenRtShin
LoosenLftToes
LoosenRtToes
LoosenLftThigh
LoosenRtThigh
LoosenWaist
ExpandFeet
ExpandLftHands
ExpandRtHands
SoleFit

| | | |
|--------------|-------------------------------------|---|
| Style | Head | CatEars BatEars BatEarsStylized BatmanMask FlattenEars Hoodie NoseBridgeOut Spiderman1 Spiderman2 TacticalHood TightHood |
| | Clothes | Boots1 Boots2 Boots3 Boots4 Gauntlets1 Gauntlets2 Gauntlets3 Gauntlets4 JumpSuit1 JumpSuit2 Sleeves SleeveswCuffs Pants Shirt Shoe1 Shoe2 Socks |
| | Eyes | EyeLashIn EyesOut1 EyesOut2 EyesOut3 EyesOut4 EyesOut5 EyesOut6 |
| | Open (UltraBodysuit only) | Open01 Open02 |

There are Left and Right versions of these morphs

Open03
Open04
Open05
Open06
Open07
Open08
Open09
Open10
Open11
Open12

Smooth

SmoothAbs
SmoothAbsAik6
SmoothGia6
SmoothTheGirl6
SmoothAbsOlympia
SmoothAbsVictoria6
SmoothLowerAbs1
SmoothLowerAbs2
SmoothLowerAbs3

Spandex Head

SpandexChin
SpandexHead
SpandexHeadAiko6
SpandexHeadTheGirl6
SpandexHeadGia6
SpandexHeadLilith6
SpandexHeadMeiLin6
SpandexHeadOlympia6
SpandexHeadStephanie6
SpandexHeadVictoria6
SpandexMask
SpandexMouth
SpandexNose
SpandexNoseBridge

Spandex

SpandexBehind
SpandexChest1
SpandexChest2
SpandexChest3
SpandexChestAbsVictoria6
SPDXBreastsCleavage1
SPDXBreastsCleavage2

| | | |
|--|----------------------|---|
| | | SPDxBreastHeavy SPDxBreastsShape01 SPDxBreastsShape02 SPDxBreastsShape03 SPDxBreastsShape04 SPDxBreastsShape05 SPDxBreastsShape06 SPDxBreastsShape07 SPDxBreastsShape08 SPDXChestAiko6 SPDXChestGia6 SPDXChestTheGirl6 SPDXChestImplants SPDXChestLilith6 SPDXChestMeiLin6 SPDXChestNatural SPDXChestOlympia6 SPDXChestStephanie6 SPDXChestVictoria6 SPDXChestVoluptuous |
| | FabricEffects | ArmBendLftWrinkles ArmBendRtWrinkles ArmDwnRtWrinkles ArmDwnLftWrinkles ForeheadWrinkles LegBendLftWrinkles LegBendRtWrinkles |

HD Morphs

These are all the HD Morphs in the main figure (UltraCatsuit). Not all these morphs are in the other figures (Cowl or Bodysuit) due to differences in geometry, (i.e. a Cowl has no hands so no hand morphs).

| Main Folder | Sub Folder | Morphs |
|-------------|-------------|---|
| HDMorph | Accessories | Belt-Loops Belt ElbowPads KneePads1 KneePads2 RubberElbows1 RubberElbows2 RubberKnees RubberNeck1 RubberNeck2 RubberNeck3 ThighPads1 ThighPads2 ThighPads3 |
| | Arm Seams | Arm01aSeam Arm01bSeam Arm02aSeam Arm02bSeam Arm03aSeam Arm03bSeam Arm04aSeam Arm04bSeam Arm05aSeam Arm05bSeam Arm06aSeam Arm06bSeam Arm07aSeam Arm07bSeam Arm08aSeam Arm08bSeam Arm09aSeam Arm09bSeam Arm10aSeam Arm10bSeam WristSeam |

Body

ArmPanel1
ArmPanel1Elbows
ArmPanel2
ArmPanel2Elbows
ArmPanelTrim
ArmPanelTrimElbow
Corset-Zipper
Corset
FrontPanel1
FrontPanel2
FrontPanel3
FrontZipper1
FrontZipper2
FrontZipper3
PantBandZipper
PantBandZipperLoops
SidePanel1
SidePanel1Knees
SidePanel1Shins
SidePanel2
SidePanel2Knees
SidePanel2Shins
SidePanel3
SidePanel3Knees
SidePanel3Shins
SidePanelTrim1
SidePanelTrim1Knees
SidePanelTrim1Shins

Body Seams

InsideSeam
InsideSeamKnees
Hip1aSeam
Hip1bSeam
Hip2Seam
Hip3Seam
FrontCorsetSeams
Neck1Seam
Neck2Seam
Neck3Seam
Neck4Seam
Neck5Seam
OutSideSeams1
OutSideSeams1Knees
OutSideSeams1Shins

| | | |
|--|-----------------------|--|
| | | OutSideSeams2 OutSideSeams2Knees OutSideSeams2Shins Torso1Seam Torso2aSeam Torso2bSeam Torso3aSeam Torso3bSeam Torso4aSeam Torso4bSeam |
| | Chest | BraCupTopSeam Chest1Seam Chest2Seam Chest3Seam UnderBreastSeam UnderWire |
| | Fabric Effects | BackBendWrinkles1 BackBendWrinkles2 BackShldrStretch BottomWrinkles ChestSideStretch1 ChestSideStretch2 ChestStretch1 ChestStretch2 ChestStretch3 ChestStretch4 ChestStretch5 ChestStretchSPDX GroinWrinkles GroinThickWrinkles HandWrinkles KneeWrinkles LftElbowWrinkles LftForeArmWrinkles LftKneeWrinkles LftShinWrinkles LftShldrWrinkles LftShldrWrinklesInside LftShldrWrinklesOutside LftSideBendWrinkles NeckWrinkles |

| | | |
|--|------------------|--|
| | | RtElbowWrinkles RtForeArmWrinkles RtKneeWrinkles RtShinWrinkles RtShldrWrinkles RtShldrWrinklesInside RtShldrWrinklesOutside RtSideBendWrinkles ShinWrinkles SideHipWrinkles SideHipThickWrinkles UnderChestStretch1 UnderChestStretch2 |
| | Leg Seams | Leg01Seam Leg02aSeam Leg02bSeam Leg03aSeam Leg03bSeam Leg04aSeam Leg04bSeam Leg05aSeam Leg05bSeam Leg06aSeam Leg06bSeam Leg07aSeam Leg07bSeam Leg08aSeam Leg08bSeam Leg09aSeam Leg09bSeam Leg10aSeam Leg10bSeam Leg11aSeam Leg11bSeam Leg12Seam |
| | Head | FaceCrownSeam FaceMidSeam |
| | Hands | GlovesAstronaut GloveSeams GlovesHeavyDuty |

| | | |
|--|-------------------|--|
| | Upper Body | GlovesWithStrap SweaterCuffs Collar1 Collar2 Collar3 Collar4 Collar5 ShldrPads1 ShldrPads2 ShldrPads3 ShldrPads4 |
|--|-------------------|--|

Surface Material Names

| Full Bodysuit | Simple Material Bodysuit |
|---------------|--------------------------|
| 1_EarCover | 1_EarCover |
| 1_Eyes1 | 1_Eyes1 |
| 1_Eyes2 | 1_Eyes2 |
| 1_Eyes3 | 1_Eyes3 |
| 1_Face1 | 1_Face1 |
| 1_Face1a | 1_Face1a |
| 1_Face1b | 1_Face1b |
| 1_Face1c | 1_Face1c |
| 1_Face2 | 1_Face2 |
| 1_Face2a | 1_Face2a |
| 1_Face2c | 1_Face2c |
| 1_Face3 | 1_Face3 |
| 1_Face3a | 1_Face3a |
| 1_Face3b | 1_Face3b |
| 1_Face4 | 1_Face4 |
| 1_Face4a | 1_Face4a |
| 1_Face4c | 1_Face4c |
| 1_Face4d | 1_Face4d |
| 1_Face5 | 1_Face5 |
| 1_Face5a | 1_Face5a |
| 1_Face5c | 1_Face5c |
| 1_Face5d | 1_Face5d |
| 1_Face5e | 1_Face5e |
| 1_Face6 | 1_Face6 |
| 1_Face6a | 1_Face6a |
| 1_Face6c | 1_Face6c |
| 1_Face7 | 1_Face7 |
| 1_Face7a | 1_Face7a |
| 1_Face7b | 1_Face7b |
| 1_Face8 | 1_Face8 |
| 1_Face8a | 1_Face8a |
| 1_Face8b | 1_Face8b |
| 1_Face8c | 1_Face8c |
| 1_Head1 | 1_Head1 |
| 1_Head2 | 1_Head2 |
| 1_Head2a | 1_Head2a |
| 1_Head3 | 1_Head3 |
| 1_Head3a | 1_Head3a |
| 1_Head4 | 1_Head4 |

| | |
|---------------|---------------|
| 1_Head4a | 1_Head4a |
| 1_Head5 | 1_Head5 |
| 1_Head5a | 1_Head5a |
| 1_Head6 | 1_Head6 |
| 1_Head6a | 1_Head6a |
| 1_Head6b | 1_Head6b |
| 1_Head7 | 1_Head7 |
| 1_Head7a | 1_Head7a |
| 1_Mouth1 | 1_Mouth1 |
| 1_Mouth2 | 1_Mouth2 |
| 1_Mouth3 | 1_Mouth3 |
| 1_Mouth4 | 1_Mouth4 |
| 1_Mouth5 | 1_Mouth5 |
| 1_Nose1 | 1_Nose1 |
| 1_Nose2 | 1_Nose2 |
| 1_Nose3 | 1_Nose3 |
| 1_Nose5 | 1_Nose5 |
| 1_Nose6 | 1_Nose6 |
| 1_Nose7 | 1_Nose7 |
| 1_Nostriles | 1_Nostriles |
| 2_Neck1 | 2_Neck1 |
| 2_Neck2 | 2_Neck2 |
| 2_Neck3 | 2_Neck3 |
| 2_Neck4 | 2_Neck4 |
| 2_Neck5 | 2_Neck5 |
| 3_Arms01a_Lft | 3_Arms01a_Lft |
| 3_Arms01a_Rt | |
| 3_Arms01b_Lft | |
| 3_Arms01b_Rt | |
| 3_Arms02a_Lft | 3_Arms02a_Lft |
| 3_Arms02a_Rt | |
| 3_Arms02b_Lft | |
| 3_Arms02b_Rt | |
| 3_Arms03a_Lft | 3_Arms03a_Lft |
| 3_Arms03a_Rt | |
| 3_Arms03b_Lft | |
| 3_Arms03b_Rt | |
| 3_Arms04a_Lft | 3_Arms04a_Lft |
| 3_Arms04a_Rt | |
| 3_Arms04b_Lft | |
| 3_Arms04b_Rt | |
| 3_Arms05a_Lft | |
| 3_Arms05a_Rt | |

| | |
|----------------|---------------|
| 3_Arms05b_Lft | |
| 3_Arms05b_Rt | |
| 3_Arms06a_Lft | 3_Arms06a_Lft |
| 3_Arms06a_Rt | |
| 3_Arms06b_Lft | |
| 3_Arms06b_Rt | |
| 3_Arms07a_Lft | 3_Arms07a_Lft |
| 3_Arms07a_Rt | |
| 3_Arms07b_Lft | |
| 3_Arms07b_Rt | |
| 3_Arms08a_Lft | |
| 3_Arms08a_Rt | 3_Arms08a_Lft |
| 3_Arms08b_Lft | |
| 3_Arms08b_Rt | |
| 3_Arms09a_Lft | |
| 3_Arms09a_Rt | |
| 3_Arms09b_Lft | |
| 3_Arms09b_Rt | |
| 3_Arms10a_Lft | 3_Arms10a_Lft |
| 3_Arms10a_Rt | |
| 3_Arms10b_Lft | |
| 3_Arms10b_Rt | |
| 4_Fingers1_Lft | 4_Hands3_Lft |
| 4_Fingers1_Rt | |
| 4_Fingers2_Lft | |
| 4_Fingers2_Rt | |
| 4_Fingers3_Lft | |
| 4_Fingers3_Rt | |
| 4_Fingers4_Lft | |
| 4_Fingers4_Rt | |
| 4_Fingers5_Lft | |
| 4_Fingers5_Rt | |
| 4_Hands1_Lft | |
| 4_Hands1_Rt | |
| 4_Hands2_Lft | |
| 4_Hands2_Rt | |
| 4_Hands3_Lft | |
| 4_Hands3_Rt | |
| 4_Thumb1_Lft | |
| 4_Thumb1_Rt | |
| 4_Thumb2_Lft | |
| 4_Thumb2_Rt | |
| 4_Thumb3_Lft | |

| | |
|----------------|----------------|
| 4_Thumb3_Rt | |
| 4_Thumb4_Lft | |
| 4_Thumb4_Rt | |
| 4_Thumb5_Lft | |
| 4_Thumb5_Rt | |
| 5_Chest01 | 5_Chest01 |
| 5_Chest02 | 5_Chest02 |
| 5_Chest03 | 5_Chest03 |
| 5_Chest04 | 5_Chest04 |
| 5_Chest05 | 5_Chest06 |
| 5_Chest06 | |
| 5_Chest07 | |
| 5_Chest08 | 5_Chest08 |
| 5_Chest09a_Lft | 5_Chest09a_Lft |
| 5_Chest09a_Rt | |
| 5_Chest09b_Lft | |
| 5_Chest09b_Rt | |
| 5_Chest10 | 5_Chest10 |
| 5_Chest11 | |
| 5_Chest12 | |
| 5_Chest13 | |
| 5_Chest14 | |
| 5_Chest15 | |
| 5_Chest16 | 5_Chest16 |
| 5_Chest17 | |
| 5_Chest18 | |
| 5_Chest19 | |
| 5_Chest20 | |
| 6_Torso01 | 6_Torso01 |
| 6_Torso02 | |
| 6_Torso03 | |
| 6_Torso04 | |
| 6_Torso05 | 6_Torso05 |
| 6_Torso06 | |
| 6_Torso07 | |
| 6_Torso08 | |
| 6_Torso09 | 6_Torso09 |
| 6_Torso10 | |
| 6_Torso11 | |
| 6_Torso12 | |
| 6_Torso13 | 6_Torso13 |
| 6_Torso14 | |
| 6_Torso15 | |

| | |
|---------------|---------------|
| 6_Torso16 | |
| 7_Hip01 | |
| 7_Hip02 | |
| 7_Hip03 | |
| 7_Hip04 | |
| 7_Hip05 | 7_Hip05 |
| 7_Hip06 | |
| 7_Hip07 | 7_Hip07 |
| 7_Hip08 | |
| 7_Hip09 | |
| 7_Hip10 | 7_Hip10 |
| 7_Hip11_Lft | |
| 7_Hip11_Rt | |
| 7_Hip12 | |
| 7_Hip13 | |
| 8_Legs01a_Lft | 8_Legs01a_Lft |
| 8_Legs01a_Rt | |
| 8_Legs01b_Lft | |
| 8_Legs01b_Rt | |
| 8_Legs01c_Lft | |
| 8_Legs01c_Rt | |
| 8_Legs01d_Lft | |
| 8_Legs01d_Rt | |
| 8_Legs02a_Lft | 8_Legs02a_Lft |
| 8_Legs02a_Rt | |
| 8_Legs02b_Lft | |
| 8_Legs02b_Rt | |
| 8_Legs02c_Lft | |
| 8_Legs02c_Rt | |
| 8_Legs02d_Lft | |
| 8_Legs02d_Rt | |
| 8_Legs03a_Lft | 8_Legs03a_Lft |
| 8_Legs03a_Rt | |
| 8_Legs03b_Lft | |
| 8_Legs03b_Rt | |
| 8_Legs03c_Lft | |
| 8_Legs03c_Rt | |
| 8_Legs03d_Lft | |
| 8_Legs03d_Rt | |
| 8_Legs04a_Lft | |
| 8_Legs04a_Rt | |
| 8_Legs04b_Lft | |
| 8_Legs04b_Rt | |

8_Legs04c_Lft
8_Legs04c_Rt
8_Legs04d_Lft
8_Legs04d_Rt
8_Legs05a_Lft
8_Legs05a_Rt
8_Legs05b_Lft
8_Legs05b_Rt
8_Legs05c_Lft
8_Legs05c_Rt
8_Legs05d_Lft
8_Legs05d_Rt
8_Legs06a_Lft
8_Legs06a_Rt
8_Legs06b_Lft
8_Legs06b_Rt
8_Legs06c_Lft
8_Legs06c_Rt
8_Legs06d_Lft
8_Legs06d_Rt
8_Legs07a_Lft
8_Legs07a_Rt
8_Legs07b_Lft
8_Legs07b_Rt
8_Legs07c_Lft
8_Legs07c_Rt
8_Legs07d_Lft
8_Legs07d_Rt
8_Legs08a_Lft
8_Legs08a_Rt
8_Legs08b_Lft
8_Legs08b_Rt
8_Legs08c_Lft
8_Legs08c_Rt
8_Legs08d_Lft
8_Legs08d_Rt
8_Legs09a_Lft
8_Legs09a_Rt
8_Legs09b_Lft
8_Legs09b_Rt
8_Legs09c_Lft
8_Legs09c_Rt
8_Legs09d_Lft

8_Legs05a_Lft

8_Legs06a_Lft

8_Legs07a_Lft

8_Legs08a_Lft

8_Legs09a_Lft

8_Legs09d_Rt
8_Legs10a_Lft
8_Legs10a_Rt
8_Legs10b_Lft
8_Legs10b_Rt
8_Legs10c_Lft
8_Legs10c_Rt
8_Legs10d_Lft
8_Legs10d_Rt
8_Legs11a_Lft
8_Legs11a_Rt
8_Legs11b_Lft
8_Legs11b_Rt
8_Legs11c_Lft
8_Legs11c_Rt
8_Legs11d_Lft
8_Legs11d_Rt
8_Legs12a_Lft
8_Legs12a_Rt
8_Legs12b_Lft
8_Legs12b_Rt
8_Legs12c_Lft
8_Legs12c_Rt
8_Legs12d_Lft
8_Legs12d_Rt
9_Foot01_Lft
9_Foot01_Rt
9_Foot02_Lft
9_Foot02_Rt
9_Foot03_Lft
9_Foot03_Rt
9_Foot04_Lft
9_Foot04_Rt
9_Foot05_Lft
9_Foot05_Rt
9_Foot06_Lft
9_Foot06_Rt
9_Foot07_Lft
9_Foot07_Rt
9_Foot08_Lft
9_Foot08_Rt
9_Foot09_Lft
9_Foot09_Rt

8_Legs10a_Lft

8_Legs11a_Lft

9_Foot14_Lft

| | |
|--------------|--|
| 9_Foot10_Lft | |
| 9_Foot10_Rt | |
| 9_Foot11_Lft | |
| 9_Foot11_Rt | |
| 9_Foot12_Lft | |
| 9_Foot12_Rt | |
| 9_Foot13_Lft | |
| 9_Foot13_Rt | |
| 9_Foot14_Lft | |
| 9_Foot14_Rt | |
| 9_Foot15_Lft | |
| 9_Foot15_Rt | |
| 9_Foot16_Lft | |
| 9_Foot17_Lft | |
| 9_Foot17_Rt | |
| 9_Foot18_Lft | |
| 9_Foot18_Rt | |
| 9_Foot19_Lft | |
| 9_Foot19_Rt | |