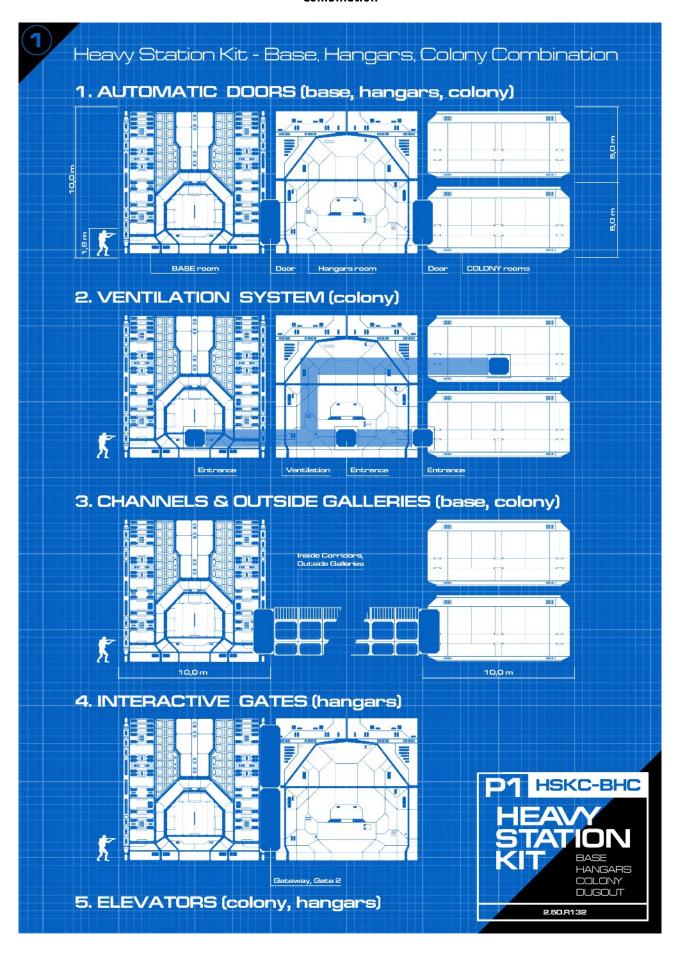
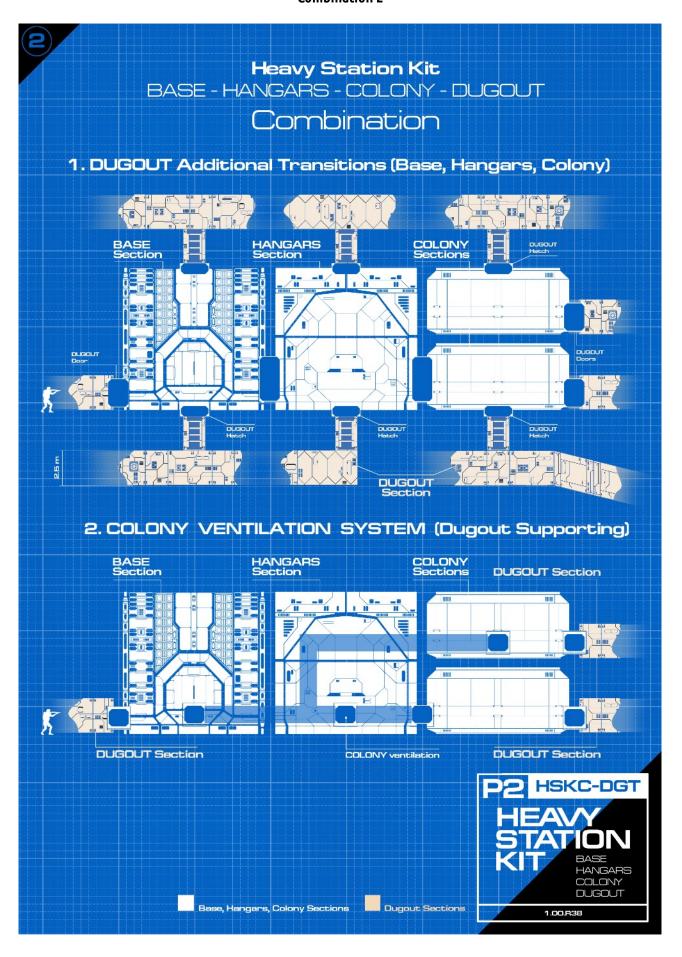


# **CONTENT**

3	Combination
5	<u>Comparison</u>
	Prefabs:
6	<b>General Information</b>
6	Base Prefabs
11	<b>Hangars Prefabs</b>
16	<b>Colony Prefabs</b>
20	<b>Dugout Prefabs</b>
24	Power-Ups Prefabs
25	<b>Dugout Blueprints</b>
26	Blueprints Setup
	Materials:
<u>3</u> 0	Base
31	<u>Hangars</u>
32	<u>Colony</u>
34	<u>Dugout</u>
35	Power-Ups
36	<u>Scripts</u>
47	General settings for 3 <sup>rd</sup> party FPC
49	<u>Installation Guidelines</u>

#### Combination





# Heavy Station Kit PACKAGES COMPARISON

Availability of the unique Elements and Acceptance of the other Packages

#### **CORE CONSTRUCTION**

	BASE	HANGARS	COLONY	DUGOUT
Floors	Unique Eligible for Hangars & Colony Accepting Hangars & Colony	Unique Eligible for Base & Colony Accepting Base & Colony	Unique Eligible for Base & Hangars Accepting Base & Hangars	Unique
Walls	<b>Unique</b> Eligible for Hangars Accepting Hangars	<b>Unique</b> Eligible for Base Accepting Base	Unique	Unique
Arches	<b>Unique</b> Eligible for Hangars Accepting Hangars	<b>Unique</b> Eligible for Base Accepting Base	Unique	Unique
Outside walls (top-down theme)	Unique Eligible for Hangars & Colony Accepting Hangars & Colony	Unique Eligible for Base & Colony Accepting Base & Colony	Unique Eligible for Base & Hangars Accepting Base & Hangars	Vacant
Supports	<b>Unique</b> Eligible for Hangars Accepting Hangars	<b>Unique</b> Eligible for Base Accepting Base	Vacant	Unique
Partitions2	<b>Unique</b> Eligible for Hangars	<b>Vacant</b> Accepting Base	Vacant	Vacant
Perimeter Fence	Unique Eligible for Hangars, Colony & Dugout Accepting Hangars & Colony	Unique Eligible for Base, Colony & Dugout Accepting Base & Colony	Unique Eligible for Base, Hangars & Dugout Accepting Base & Hangars	<b>Vacant</b> Accepting Base, Hangars & Colony

#### TRANSITION FACILITIES

	BASE	HANGARS	COLONY	DUGOUT
Doors	<b>Unique</b> Eligible for Hangars & Colony Accepting Hangars, Colony & Dugout	Unique Eligible for Base & Colony Accepting Base, Colony & Dugout	Unique Eligible for Base & Hangars Accepting Base, Hangars & Dugout	<b>Unique</b> Eligible for Base, Hangars & Colony
Gates	<b>Vacant</b> Accepting Hangars	<b>Unique</b> Eligible for Base	Vacant	Vacant
Gateways	<b>Vacant</b> Accepting Hangars	Unique (10x10 and 20x10 meters) Eligible for Base	Vacant	Vacant
Ventilation	<b>Vacant</b> Accepting Colony	<b>Vacant</b> Accepting Colony	<b>Unique</b> Eligible for Base, Hangars & Dugout	<b>Vacant</b> Accepting Colony
Stairs	<b>Unique</b> (10 meters for Floor) Eligible for Hangars & Colony	<b>Vacant</b> (10 meters for Floor) Accepting Base	Unique (5 meters for Floor) Accepting Base	Unique (2.5 meters for Floor)
Ladders	Unique (10 meters for Floor) Eligible for Hangars & Colony Accepting Hangars, Colony & Dugout	Unique (Small Garage Ladder) Eligible for Base & Colony Accepting Base, Colony & Dugout	<b>Unique</b> (Swimming Pool Ladder) Eligible for Base & Hangars Accepting Base, Hangars & Dugout	<b>Unique</b> (2.5 meters for Floor) Eligible for Base, Hangars & Colony
Elevators	<b>Vacant</b> Accepting Hangars & Colony	Unique (10 meters for Floor) Eligible for Base & Colony Accepting Colony	Unique (5 meters for Floor) Eligible for Base & Hangars Accepting Hangars	Vacant
Channels	<b>Unique</b> Eligible for Hangars & Colony	<b>Vacant</b> Accepting Base	<b>Vacant</b> Accepting Base	Vacant
Galleries	<b>Vacant</b> Accepting Colony	<b>Vacant</b> Accepting Colony	<b>Unique</b> Eligible for Base & Hangars	Vacant
Ceiling & Floor Entrances	<b>Vacant</b> Accepting Dugout	<b>Vacant</b> Accepting Dugout	<b>Vacant</b> Accepting Dugout	Unique Eligible for Base, Hangars & Colony

Other Themes of the Prefabs (Equipment, Furniture, Decorations, Objects, Props, etc.) can be used in any of the Packages:

Base, Hangars, Colony and Dugout

#### **PREFABS**

#### **General Information**

The side and the height of the smallest cell or room possible is 10 metres (only the COLONY has 5m ceiling height). If the scene is new, for just snapping the prefabs, we do recommend start building at the position x(0) - y(0) - z(0).

When you do this, most of the prefabs will appear right at their place. Some regular edits at the building of the cell:

- · Walls and the like may be duplicated and rotated into the desired position
- The arches and doors will require 5m adjustment to the desired direction
- If the Top-Bottom prefab is placed at the ceiling, then it should have 10 metres offset by Y (5 meters for COLONY), 180 rotation by Z or X

At building the second cell there is 10 metres offset, because the side of the cell is 10 metres. So it is possible just duplicating the existing prefabs that are close to the position, and setting the required offset.

The Heavy Station Kit AUGMENTED Packages (Base+Hangars+Colony+Dugout+Power-UPs) has 1790 Prefabs.

The Heavy Station Kit Packages (Base+Hangars+Colony+Dugout) has 1187 Prefabs.

The Heavy Station Kit duguot AUGMENTED comes with 152 Blueprints.

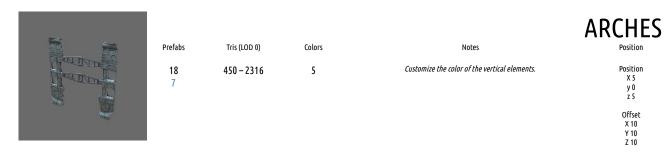
The Heavy Station Kit duquot comes with 110 Blueprints.

# Heavy Station Kit BASE Prefabs

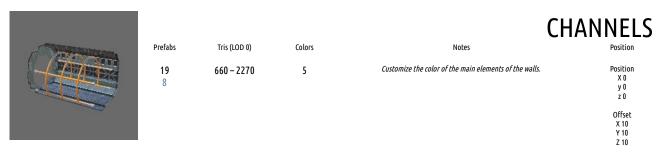
The Heavy Station Kit base 2.50 AUGMENTED has **318** Prefabs:

The Heavy Station Kit base 2.50 has 195 Prefabs:

#### 5m Snap Value Overall



There are intentional gaps between the walls. Arches do fill these. Also they may work as visual strengthening of the level.



The corridors between the rooms and/or a web of tunnels.



- 41	-1 ()			DISPLAYS
Prefabs	Tris (LOD 0)	Colors	Notes	Position
26 19	2 – 18	1	Each screen has its own independent material However there are the same in size screens, so You may exchange their materials.	Free

The Displays are possible to place on every appropriate surface, for example the walls. All Displays Prefabs are included in the Equipment Prefabs. The screens are animated.



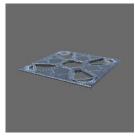
Prefabs	Tris (LOD 0)	Colors	Notes	DOORS
15 7	4 – 920	1		Position X 5 y 0 z 5
				Offset X 10 Y 10 Z 10

The Doors and Energy Gates for inside and outside. The special floor piece for the transport to move over. The railings are also available for the free positioning.



			EQU	<b>IPMENT</b>
Prefabs	Tris (LOD 0)	Colors	Notes	Position
29 14	76 – 6160	5	Customize the color of the band of the stands.	Free

The Digital Equipment – from the little boxes, to the tables and the controlling door consoles – all with the animated displays. On how to setup consoles, please refer to "the Door and Consoles Setup", in this documentation

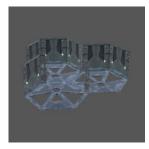


Prefabs	Tris (LOD 0)	Colors	Notes	FLOORS
31 19	128 – 592	1		Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

The different variations of the floors (and ceiling) pieces for small and large rooms. If the building is one-story-tall, pick the one-sided piece to save on triangles.

			FI	OORS FIL
Prefabs	Tris (LOD 0)	Colors	Notes	Position
37 22	6 – 17804	1		Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

Plan the floors and ceilings in Your scene. Whether it be total fill of the surface, or some clear parts with railings, or the center piece removed for placing the ladder.



			HEXA & PEN	TA ROOM
Prefabs	Tris (LOD 0)	Colors	Notes	Position
5 0	3240 - 3840	1		Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

Vertical climbing on the walls outside or the ladder into the storage room. And who know where else these will simplify the way.



				LAUUEK
Prefabs	Tris (LOD 0)	Colors	Notes	Position
2 1	3240 – 3840	1		Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

Vertical climbing on the walls outside or the ladder into the storage room. And who know where else these will simplify the way.



				PAR	RTITIONS
~ 6	Prefabs	Tris (LOD 0)	Colors	Notes	Position
	7 7	1420 – 3192	5	Customize the color of the warning stripes.	Position X 0 y 0 z 0
					Offset X 10 Y 10 Z 10
					or Free

Made for the visual zoning of the room, Partitions may be placed using the recommended position or freely.



			PARIII	IONS
Prefabs	Tris (LOD 0)	Colors	Notes	Position
15 14	782 – 5526	5	Customize the color of the vertical elements and the pipes itself.	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

Many Partitions 2 has horizontal and vertical pipelines. It enhances the industrial or bunker feeling, where appropriate.



				PIPELINE
Prefabs	Tris (LOD 0)	Colors	Notes	Position
8	1336 – 1696	5	Customize the color of the pipes.	Free

Pipe alone, for making Your own pipelines. So it is possible combining them in length, making the lines of pipes for positioning for example horizontally along the walls.



				PROPS
Prefabs	Tris (LOD 0)	Colors	Notes	Position
6 6	1948 – 4340	5	Customize the color of the painted elements of the boxes and barrels.	Free

Boxes, Barrels and Tanks for free positioning.



				STAIRS
Prefabs	Tris (LOD 0)	Colors	Notes	Position
42 31	44 – 3146	1		Position X Free Y 0 Z Free
				Offset
				X 2
				Y Free
				Z 2

The most hard asset for placing is the Stairs prefab. It require vertical adjustment by Y. But horizontal offset is 2m. With independent pieces of the prefab Stairs, it is possible making not only the way up, but also various platforms and transitions with crossings.



				SUPPORT
Prefabs	Tris (LOD 0)	Colors	Notes	Position
4	656 – 2624	1		Position X 0 y 0 z 0
				Offset
				X 10
				Y 10
				Z 10

Made to look strong, they enhance the feel of heaviness and safety of the construction. It is possible not to use Support prefab.



			IOP-	ROLION
Prefabs	Tris (LOD 0)	Colors	Notes	Position
5	3550 – 5472	1		Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

The little details does matter. Placed at the floor/ceiling, Top-Bottom prefab is meant for enhancing the atmosphere, telling the different stories – like the area under maintenance or technical zone.



				TOP-DOWN
Prefabs	Tris (LOD 0)	Colors	Notes	Position
22 8	68 – 1184	1		Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

Outside-styled walls and closing elements to make a scene for the Top-Down view.



				WALLS
Prefabs	Tris (LOD 0)	Colors	Notes	Position
26 25	100 – 384	5	Customize the color of the main elements of the walls.	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

The Wall Lights and Walls prefab. With/without the opening for placing the door. From one wall piece to four wall pieces combined.

And one **Zzz Point Light** scripted Prefab (AUGMENTED Version)

# Heavy Station Kit HANGARS Prefabs

The Heavy Station Kit hangars 2.50 AUGMENTED has **282** Prefabs:

The Heavy Station Kit hangars 2.50 has 183 Prefabs:

#### 5m Snap Value Overall



			AGGR	LGAIL
Prefabs	Tris (LOD 0)	Colors	Notes	Align
25	70 – 18510	6	Customize colors for some elements	for Rails:
11				Position X 5 y 0 z 5
				Offset X 10 Y 10 Z 10
				for Other:
				FREE

**Aggregates**Ballons and Cables, Cargocase, Consoles, Rail and Crane modular system, Reactor and Server.



Prefabs	Tris (LOD 0)	Colors
13 0	958 – 12056	1

# **AGGREGATES 2**

**Aggregates2** are huge single, dual and trio Pipes, Flat reactor, Huge barrels with various pipes.



				<b>ARCHES</b>
Prefabs	Tris (LOD 0)	Colors	Notes	Align
26 18	420 – 716	2	Customize colors for inside panels	Position X 5 y 0 z 5
				Offset X 10 Y 10 Z 10

are three types of L shaped design elements, with customizable solid and/or transparent pieces .



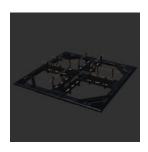
				DISPLAYS
Prefabs	Tris	Colors	Notes	Align
7 6	2 – 24	1		Parent Object



				DOORS
Prefabs	Tris	Colors	Notes	Align
5 5	78 – 1236	6	Customize colors for some elements	Position X 5 y 0 z 5
				Offset X 10 Y 10 Z 10



Prefabs	Tris	Colors	Notes	LEVATORS
1	9944	1		Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10



				FLUUK:
Prefabs	Tris (LOD 0)	Colors	Notes	Align
66 64	28 – 5120	2	Customize colors for fills elements	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

**Floors** come as Floor Frames in sizes of 10 and 5 meters. There are also two types of narrow Transition elements and four types of Hand-rails. To increase visual interest, there are solid and transparent Floor Fill pieces to fit in floor frames.



				GAKAGE
Prefabs	Tris (LOD 0)	Colors	Notes	Align
8	60 – 2374	1		FREE

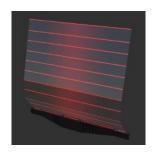
Garage
are modular pieces for vehicle with wheels. Around that can be placed special maintenance platforms and with ladder for humans to get up. Also theme has own console and aggregate.



			G	ALEWAY
Prefabs	Tris (LOD 0)	Colors	Notes	Align
20 15	44 – 10174	1		FREE

#### Gateway

are room-scaled areas for vehicles, with full-sized animated gates.



				OUTSIDE
Prefabs	Tris (LOD 0)	Colors	Notes	Align
10 4	178 – 15746	1		FREE

has modular energy barrier with intent for placing around the base. Also huge stairs, animated radar, cone-shaped station.



Pipeline1
are new small modular pipelines.

			PI	PELINE 1
Prefabs	Tris (LOD 0)	Colors	Notes	Align
5 0	364 – 728	6		FREE



				PIPELINE 2
Prefabs	Tris (LOD 0)	Colors	Notes	Align
19 0	928 – 2292	6		FREE

**Pipeline2** looks like ones in Base v2, but now they are modular.



				<b>PROPS</b>
Prefabs	Tris (LOD 0)	Colors	Notes	Align
8	236 - 3852	6	Customize colors for some elements	FREE

**Props** are small and medium barrels, small battery, small to medium to big boxes, and small but narrow and long box that can be stacked on itself in pyramid form.



Prefabs	Tris (LOD 0)	Colors	Notes	SUPPORTS
19 15	132 – 4336	1		Position X 0 y 0 z 0 or FREE
				Offset X 10 Y 10 Z 10
				and FREE

**Supports** are used to enhance heavy look of the base, and they fit into special slot in Floor Frame pieces.



			TOP B	OTTOM
Prefabs	Tris (LOD 0)	Colors	Notes	Align
7	564 – 574	2	Customize colors for some elements	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

**Top Bottom** are used to increase visual depth of the level when needed, and they come in three different pieces.



			10	P-DOW
Prefabs	Tris (LOD 0)	Colors	Notes	Align
15 15	74 – 370	1		Position X 0, 5 y 0, 5 z 0, 5
				Offset X 10, 5 Y 10, 5 Z 10, 5
				and FREE

**Top-Down** has four types of walls for outside, and elements to close gaps for Top-Down use.



			TOP	-DOWN 2
Prefabs	Tris (LOD 0)	Colors	Notes	Align
9	164 – 1852	1		Position X 0, 5 y 0, 5 z 0, 5
				Offset X 10, 5 Y 10, 5 Z 10, 5
				and FREE

**Top-Down2** has new supports for outside that strenghten visual look, three additional walls for outside, and pieces for Top-Down use.



				WALL:
Prefabs	Tris (LOD 0)	Colors	Notes	Align
18 16	111 – 534	6	Customize colors for some elements	Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10
				and FREE

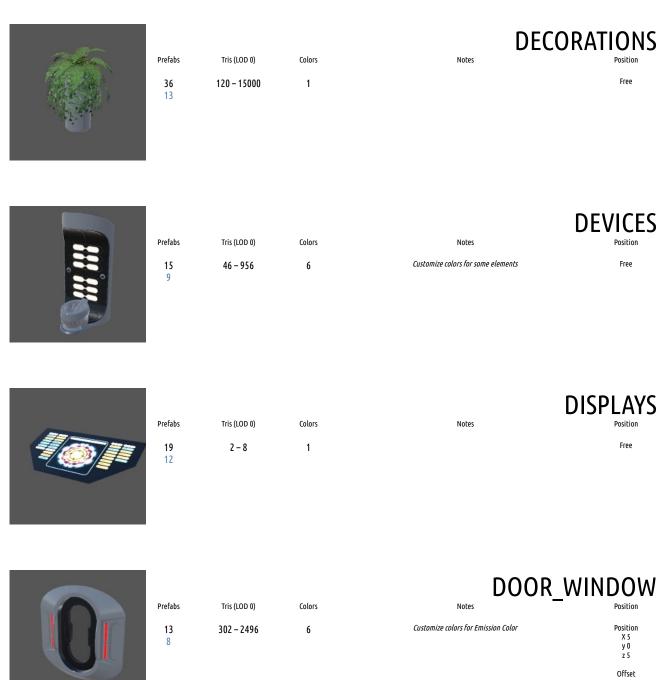
Walls has 5 and 10 metres elements, flat and L and C shaped, with openings for doors, gates and windows.

And one  $\mbox{\bf ZZZ}$   $\mbox{\bf Point Light}$  scripted Prefab (AUGMENTED Version)

# **Heavy Station Kit COLONY Prefabs**

The Heavy Station Kit colony 2.50 AUGMENTED has **451** Prefabs: The Heavy Station Kit colony 2.50 has **291** Prefabs:

#### 5m Snap Value Overall



|--|

Prefabs	Tris (LOD 0)	Colors
14	60 - 5760	1

#### Notes

Notes

Notes

# **ELEVATOR**

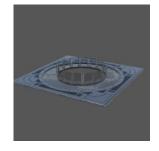
Position X 0 y 0 z 0

Offset X 10 Y 10 Z 10

Tris (LOD 0)	Colors
134 – 5800	1
	. ,

# **EQUIPMENT**Position

Free



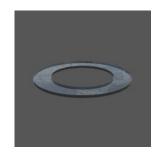
Prefabs	Tris (LOD 0)	Colors
41 34	14 – 1042	1

# FLOORS

Position X 0 y 0 z 0 Offset X 10 Y 10 Z 10



			FL	IRNITURE
Prefabs	Tris (LOD 0)	Colors	Notes	Position
43 26	76 – 4288	6	Customize colors for some elements	Free



refabs	Tris (LOD 0)	Colors
17 17	4 – 5600	1

Notes

GLASS

Free



Prefabs	Tris (LOD 0)	Colors
60	10 – 2680	6

Free

Notes Customize colors for some elements

**OBJECTS** 



refabs	Tris (LOD 0)	Colors
22	80 – 3140	1
11		

Notes

Customize the color of the vertical elements.



refabs	Tris (LOD 0)	Colo
33	30 – 3076	1
4.0		

OUTSIDE\_TOPDN Position

Customize the color of the vertical elements.

Position X 0 y 0 z 0

Offset X 10 Y 10 Z 10



refabs	Tris (LOD 0)	Colo
24 14	56 – 3652	1

OUTSIDE\_TOPDN\_2

Notes

Position X 0 y 0 z 0

Offset X 10 Y 10 Z 10



Prefabs	Tris (LOD 0)	Colors
16 7	76 – 11926	1
7		·

Notes

**STAIRS** 

Position

Position X 0 y 0 z 0

Offset X 10 Y 10 Z 10



Prefabs	Tris (LOD 0)	Colors	Notes	WALLS
53 46	14 – 576	6		Position X 0 y 0 z 0
				Offset X 10 Y 10 Z 10

And one **ZZZ Point Light** scripted Prefab (AUGMENTED VErsion)

# Heavy Station Kit DUGOUT Prefabs

The Heavy Station Kit dugout AUGMENTED has  $\bf 697$  Prefabs: The Heavy Station Kit dugout has  $\bf 489$  Prefabs:

#### 0.5m Snap Value Overall



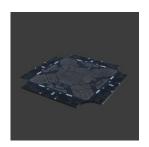
Prefabs	Tris
42 26	2 – 852

### **DISPLAYS**

Notes

Materials
Heavy Station Kit / DUGOUT / Materials / N\_Screens\_A
Heavy Station Kit / DUGOUT / Materials / N\_Screens\_BC
Heavy Station Kit / DUGOUT / Materials / N\_Screens\_S (Augmented only)
Heavy Station Kit / DUGOUT / Materials / N\_Screens\_S (Augmented only)

Animated displays are part of prefabs. Flats can be used apart.



Prefabs	Tris
22 22	2 – 280

**GAPS** 

Notes

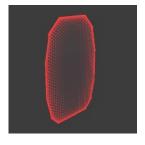
Materials

Heavy Station Kit / DUGOUT / Materials / N\_Gaps

Heavy Station Kit / DUGOUT / Materials / N\_A. Out

Heavy Station Kit / DUGOUT / Materials / N\_A. In

See-through Floor pieces.



Prefabs	Tris
52 0	2 – 14
v	

### **PLATES**

Notes

Materials
Heavy Station Kit / DUGOUT / Materials / N\_Screens\_P (AUGMENTED ONLY)

Shop signs, Transparent Barriers, etc.



Prefabs	Tris
<b>65</b> 57	10 – 2852

TYPE A Exterior

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_A\_Out

Biggest parts. Windows, External props, etc. Core, Transition and Props.



# Prefabs Tris 53 3 – 1712 53

### TYPE A Interior

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_A\_In

Biggest parts. Windows, big Crossroads, wall hatches, Stairs, etc. Core and Transition.



Prefabs	Tris
35 35	50 - 4328

# **TYPE A Props**

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_A\_Props

Interior arches, Engine, Stands, Pipelines, etc. Interior & Exterior Props.



Prefabs	Tris
37 37	24 – 112

### TYPE B Exterior

Votes

Materials Heavy Station Kit / DUGOUT / Materials / N\_BC\_Out

B Exterior Unique Windows, Floor Pipeline Socket. Core, Transition, etc.



Prefabs	Tris
<b>45</b> <b>45</b>	2 - 508

### TYPE B Interior

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_BC\_In

B Interior Unique Windows, Floor Pipeline Socket. Core and Transition.



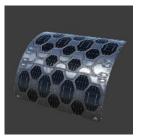
Prefabs	Tris
17 17	262 - 1984

**TYPE B Props** 

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_BC\_Props

Wall point devices, pipelines, handrails. Interior Props.



Prefabs	Tris
99	1 - 3152
99	

### TYPE BC Exterior

Notes

Materials Prefabs/Walls/Meshes/Materials/N\_BC\_Out

#### Applies also for B and C. Core, Transition and Props.



Prefabs	Tris
15 15	14 – 1402

### **TYPE BC Interior**

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_BC\_In

#### B&C joint Pieces, tiny Crossroads, floor hatches. Transition.



Prefabs	Tris
4	310 – 2110
4	

# **TYPE BC Props**

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_BC\_Props

#### Switches, Ladder and Fan. Interior Props.



Prefabs	Tris
24 24	32 - 72

## TYPE C Exterior

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_BC\_Out

#### C Exterior Unique Windows. Core, Transition.



Prefabs	Tris
36 36	2 – 297

## TYPE C Interior

Notes

Materials Heavy Station Kit / DUGOUT / Materials / N\_BC\_In

Core and Transition.

## **TYPE C Props**

Prefabs Tris

11 288 – 1652
11

Materials Heavy Station Kit / DUGOUT / Materials / N\_BC\_Props

Notes

Wall point devices, pipelines, handrails. Interior Props.



Prefabs	Tris
41 6	80 – 1672

TYPE S

Materials Heavy Station Kit / DUGOUT / Materials / N\_S\_Out\_In

Notes

Cockpit, external equipment, etc. Exterior & Interior Core, Transition and Props.



Prefabs	Tris
61	142 - 5592

**TYPE S Props** 

Notes

Materials
Heavy Station Kit / DUGOUT / Materials / N\_S\_Props (AUGMENTED ONLY)

Living, consoles, etc. Interior props.



Prefabs	Tris
38 0	12 – 6170

**Platforms** 

Notes

Materials
Heavy Station Kit / DUGOUT / Materials / N\_PL (AUGMENTED ONLY)
Heavy Station Kit / DUGOUT / Materials / N\_PL\_Win (AUGMENTED ONLY)

Space open platforms, transitions, and props.

#### Did you know that you can mass-select prefabs?

This can be useful, for example, as a culling mask for a selective Sun light - one for interior, and one for exterior.

As the assets are somewhat keyworded:

\_II\_ lets you select all the interior,

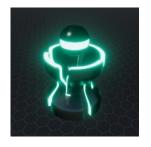
while **\_EE**\_ - all the exterior pieces.

Glass folder in Prefabs is for source meshes only. Complete items are in their appropriate Themes.

# Heavy Station Kit POWER-UPs Prefabs

Heavy Station Kit power-ups AUGMENTED has **42** Prefabs:

The Heavy Station Kit power-ups has 29 Prefabs:



Prefabs	Tris	
36	376 - 10634	
24	1136 - 5856	

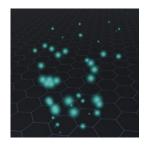
### **POWER-UPs**

Materials

Heavy Station Kit / POWER-UPs / Materials / ...

Power-Ups AUGMENTED items with C# Animations. 8 Themes.

Power-Ups items with C# Animations. 4 Themes.



Prefabs		Tris
4		-

**PARTICLES** 

Materials

\_

4 Color Themes.



Prefabs	Tris
2 1	17118 (LOD 0)
	3423 (LOD 3)

**SPAWN** 

Materials

Heavy Station Kit / POWER-UPs / Materials / ...

Spawns with Animated Material and Audio Source.

# Heavy Station Kit DUGOUT Blueprints

The Heavy Station Kit dugout 1.03 AUGMENTED has 152 Blueprints:

The Heavy Station Kit dugout 1.03 has 110 Blueprints:

#### 0.5m Snap Value Overall



Blueprints

Shuttle Systems

Purpose

Movable and controllable pieces like Engines that come with Scripts



Blueprints

32

Exterior, interior and props Type A Blueprint pieces.



Blueprints

56

Purpose

Exterior, interior and props Type B Blueprint pieces.

Type\_B

Type\_A



Blueprints

35

Purpose

Exterior, interior and props Type C Blueprint pieces.

Type\_C



Blueprints

14 0

Exterior, interior and props Type S Blueprint pieces.

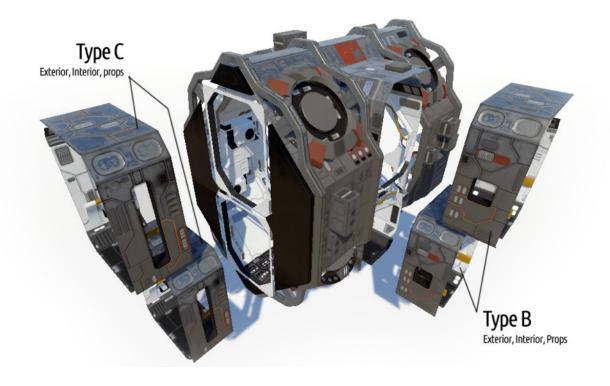
Type\_S

# Blueprint setup

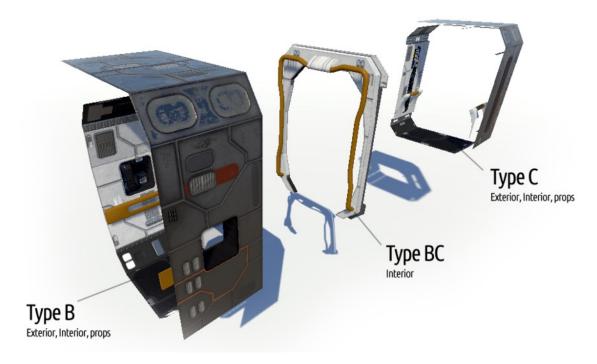
## Type A Compilation



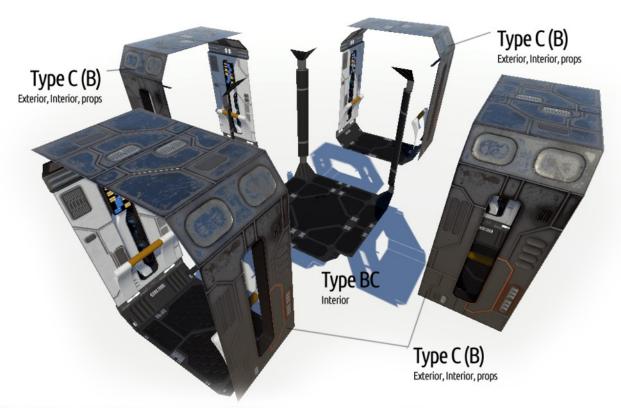
Type A, B, C Compilation



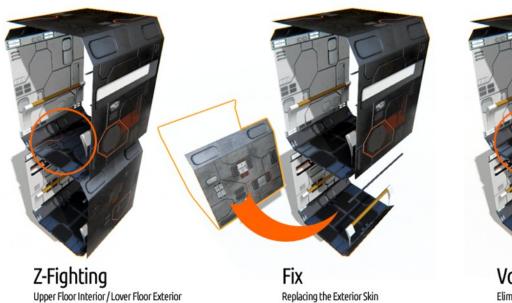
## Type B&C Joint



**Types B&C Crossroad** 



## Types B&C Z-Fighting Fixed



Voila!

Elimination of the Problem

When you are making multi floor section using B or C pieces 'Z-Fighting' will occur, as exterior of lower floor section will creep in.

It is easy to solve. Hide this part from Blueprint and add an appropriate piece without exterior to replace it (from Prefab folder).

'Z-Fighting' vanished as error introducing piece got replaced.

## Combining Irregular Prefabs

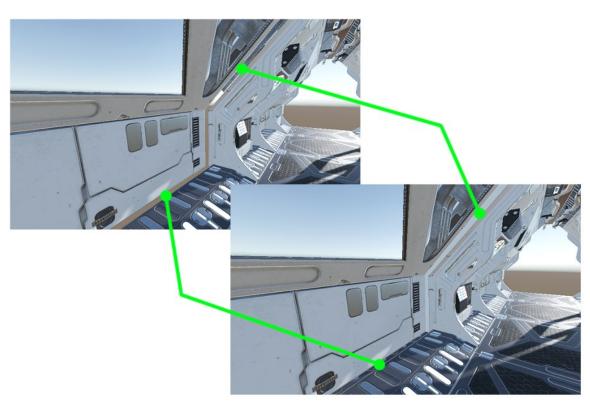
Straight, X-shaped and Curved Blueprints with Windows when combined with Windowless require these pieces:

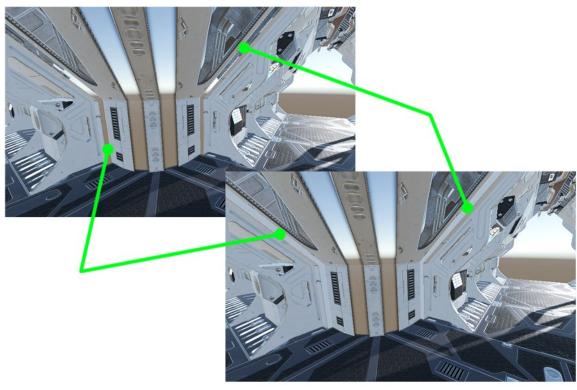
require these pieces:

DAI\_II\_I\_to\_Xwin

DAI\_II\_Floor\_Wide

(Prefabs/Type A Interior)





# Heavy Station Kit BASE Materials

DISPLAYS (Materials)	(Meshes)	DOORS (Materials)	(Meshes)
B2_Eq1	B2_Eq_1	B2_EG_OFF	B2_EG
B2_Eq2	B2_Eq_2	B2_EG_ON	B2_EG
B2_Eq3	B2_Eq_3	Glass_Dark	Door_a_glass
B2_Eq5A1	B2_Eq_5D, B2_Eq_5T	Glass_Green	Door_a_glass
B2_Eq5A2	B2_Eq_5D. B2_Eq_5T	Glass_Red	Door_a_glass
B2_Eq41	B2_Eq_4, B2_Eq_7		
B2_Eq42	B2_Eq_4, B2_Eq_7	<b>EQUIPMENT</b> (Materials)	(Meshes)
B2_Eq43	B2_Eq_4, B2_Eq_7	B2_Eq(0-4)	Eq(1-5), Eq(8-10)
B2_Eq44	B2_Eq_4, B2_Eq_7		Chan_(11-12), Chan_(41-44), Arm
B2_Eq51	B2_Eq_5, B2_Eq_7		Door_a, Door_a_H, Door_a_slide
B2_Eq52	B2_Eq_5, B2_Eq_7	B2_Eq_Out	Eq20a, Eq20b, Eq20c, Eq21, Eq23c
B2_Eq_23c	B2_EQ_23c	B2_Eq_Out1	Eq23, Eq23a, Eq23b, Eq23d
B2_TB_Med	B2_TB_M1, B2_TB_M2, B2_TB_M3		
B2_TB_Small	B2_TB_S1, B2_TB_S2, B2_TB_S3	FLOORS (Materials)	(Meshes)
B2_TD_Part2	B2_TD_PRT2	B2_Floors	Floor_(14), Floor_(67)
Disp_Cons	B2_Disp_Cons		FBC_(), FCC_(), FLC_()
Disp_Cons_Mode	B2_Disp_Cons		FF_base2_El()
Disp_Cons_Power	B2_Disp_Cons		FF_base2_Rel()
			St_Railing()
TOP-BOTTOM (Materials)	(Meshes)		B2_fba
B2_Top_Bottom	TB_(1-3)_F		Support_(1-4)
B2_TB_PH	TB_Hexa_F, TB_Penta_F	B2_Floors_PH	Floor_Hexa(), Floor_Penta()
			B2_FFH(), B2_FFP()
TOP-DOWN (Materials)	(Meshes)		
B2_TD_2_RGlass	TD_base2_RGlass_(1-3)	PROPS (Materials)	(Meshes)
B2_TD_Roof	TD_base_Roof(1-3)	B2_Props(0-4)	Barel(1-2), Box(1-2), Tank(1-2)
B2_TD_Roof1	TD_base2_RoofG_(1-3)		
B2_TopDown	TD_Base2_WE_M, TD_base_part2,	STAIRS (Materials)	(Meshes)
	TD_base_outwall(),	B2_Stairs, B2_Stairs_NL	St_1()-St_10()
	TD_base_topwall, TD_base_topwall1,		B2_HR_()
	TD_base_topwall2, Base2_Egate_0,		ladder1
	TD_base_topwall_(24), Ladder2,		
	B2_TD_HandRail, B2_TD_HandRail2	WALLS (Materials)	(Meshes)
B2_TopDown1	Arches_C_1, TD_base_topwall3,	B2_Walls(0-4)	All Arches, Partitions, Partitions2,
	Floor_5_base, Floor_5_base_C,		Pipeline, and Walls Meshes
	Floor_5_base_F, Floor_5_base_Plate,		
	Floor_5_base_TB, B2_Egate,		
	B2_EGate0, B2_EgateA, B2_EgateB,		

# Heavy Station Kit HANGARS Materials

AGGREGATES (Materials)	(Meshes)	FLOORS (Materials)	(Meshes)
H2_Aggregates_(0-5)	Agg_(), H2_P1_(1-5),	H2_Floors, H2_Floors_NoL	floor_0h(), floor_1h(),
	H2_P2_(01-19)		floor_1h_fill(), floor_1h_HR,
			floor_2h(), floor_2h_fill(),
AGGREGATES2 (Materials)	(Meshes)		floor_2h_HR, floor_3h(),
H2_Agg2_Light	H2_Agg_Light1, H2_Agg_Light2		floor_4h(), floor_5h(),
H2_Aggregates	H2_Agg_(1-13)		H2_floor_6(), handrail_(1-4),
			transition(1-3)
DISPLAYS (Materials)	(Meshes)	H2_Floors_NoL, H2_FloorsGlass	floor_1h_Glass, floor_1h_Glass_one,
H2_Dis_Door	H2_Dis_Doors		floor_2h_Glass, floor_2h_Glass_one,
H2_Disp_Cons1	H2_Cons1		H2_FF_T
H2_Disp_Cons1D	H2_Cons1_D		
H2_Disp_Cons2	H2_Cons2	GARAGE (Materials)	(Meshes)
H2_Disp_Cons4	H2_Cons4	H2_Garage	H2_Gar_(1-8)
H2_Disp_Cons4D	H2_Cons4_D		
H2_Disp_Garage	H2_Gar_5_Light	GATEWAY (Materials)	(Meshes)
		H2_Gateway	Brace, Gateway(1-2), Hook,
DOORS (Materials)	(Meshes)		GW_gate(1-2), Ladder
Door2_(Green, Grey, Red)	door_3_glass	H2_Shield	Shield
PROPS (Materials)	(Meshes)	OUTSIDE (Materials)	(Meshes)
H2_Props_(0-5)	hangar_barrel(1-2), hangar_battery1,	H2_LightWall, H2_LightWall_2	H2_Out_Ewall()
	hangar_box(1-5)	H2_Out1_Light	H2_Out_1_Light
		H2_Out2_Light	H2_Out_2A_Light
SUPPORTS (Materials)	(Meshes)	H2_Out3_Light	H2_Out_3_Light, H2_Out_3A_Light
H2_Supp_Doors_(0-5)	H2_Cel_(02, 04), H2_Cel_(1-8),	H2_Outside	H2_Out_(1-6)
	H2_Sup_(1-4), Mount, SG_2,		
	Support_5(), Door_(0-3), Gate,	TOP BOTTOM (Materials)	(Meshes)
	Elevator1(), H2_Elevator, Plate	H2_TB, H2_TB_A	H2_TB_Cover, TB_II_(1-3)
WALLS (Materials)	(Meshes)	TOP-DOWN (Materials)	(Meshes)
H2_Arches()	Glass_Arch_(1-4), Glass_Out_(),	H2_Top-Down	TD_hangar_ARCH(0-1),
	Glass_Wall_()		TD_hangar_OW(1-4),
H2_Walls1_(0-5)	Wall_(1-4), arche_(1-3)		TD_hangar_TW(0-2)
H2_Walls2_(0-5)	Wall_(5-7)		
		TOP-DOWN2 (Materials)	(Meshes)
		H2_TopDown2	H2_Outwall(), H2_Support(),
			H2_Topwall

# **Heavy Station Kit COLONY Materials**

<b>DECORATION</b> (Materials)	(Meshes)	DISPLAYS (Materials)	(Meshes)
C2_Decoration	C2_Dec_PAN(1-3),	C2_ServerL, C_Light, C_Energy_Door	C_Dis_Stand2
	C_Nat_Fern(), C_Nat_Flower(),	C2_ServerS, C_Light, C_Energy_Door	C_Dis_Stand1
	C_Nat_Grass(), C_Nat_Ground()	C_Control1	C_Dis_Control1
C2_Stones	C2_Dec_PAN1_St, C2_Dec_PAN2_St,	C_Control2	C_Dis_Control2
	C_Stone(2-4)	C_Control3	C_Dis_Control3
C_Leaf(1-3)	C_Tree_Leafs1	C_Displays(1-4)	C_Dis_Planet, C_Dis_Scr(2-3)
C_Tree(1-3)	C_Tree_Tree1	C_ElevDispDn, C_ElevDispMove	C_El_DisplDn
	- 11- 11	C_ElevDispUp	C_El_DisplUp
<b>DEVICES</b> (Materials)	(Meshes)	C_Med	C_Dis_MConsole
C2_Devices_(0-5)	C_Dev_Bidet, C_Dev_Bowl,	C_Monitor	C_Dis_Monitor
cz_bevices_(v sy	C_Dev_Button(1-3), C_Dev_Console,	C_Netbook	C_Dis_Netbook
	C_Dev_Pallet, C_Dev_Pod_Med,	C_Pad	C_Dis_Pad
	C_Dev_Podium(1-3), C_Dev_Sho,	C_Ray	C_Dis_Scr1(), C_Dis_Ray
	C_Dev_Sup_Med, C_Dev_Support,	DOOR WINDOW (Marketing)	(Marakara)
	C_Dev_Tap, C_Dev_Taps,	DOOR-WINDOW (Materials)	(Meshes)
	C_Dev_Towel, C_Dev_Uri,	C2_Doors()	C_BorderKit, C_Door(), C_Vent(),
	C_Dev_Washstand, C_Pot(1-3),		C_Win()
	C_Dev_Washstand1		
CLOOPS (Makes) 12	(Marshar)	ELEVATOR (Materials)	Meshes
FLOORS (Materials)	(Meshes)	C2_Elevator	C2_El_Cons2, C2_El_Elevator(),
C2_Floors()	C_Floor(), C2_Floor()		C2_El_Tube, C2_El_Wall,
	C2_Floor_HR1, C2_Floor_HR1A,		C_El_Cabine, C_El_Console,
	C_Stairs3_A1m, C_Stairs3_Am,		C_El_Flloor(), C_El_Plate(),
	C_Stairs3_B1m, C_Stairs3_Bm,		C_El_Support, C_El_Tank
	C_Stairs3_C1m, C_Stairs3_Cm,		
	C_Stairs_1, C_Stairs_2, C_Stairs_2A,	FURNITURE (Materials)	(Meshes)
	C_Stairs_2B, C_Stairs_2C,	C2_Furniture_(0-5)	C_Fu_()
	C_Stairs_2D, C_Stairs_3, C_Stairs_4		
		GLASS (Materials)	(Meshes)
KITCHEN (Materials)	(Meshes)	C_Mirr	C_Dis_Mirror
C2_Objects2_(0-5), NH	C2_Blender, C2_Bracket(),	C_Glass	C_Glass_HR(), C_Glass_Sho,
	C2_CoffeeTable, C2_Container(1-4),		C_GlassD&W, C_GlassPano,
	C2_Dish(1-5), C2_Drawer(30,60),		C_GlassSlider, Glass_Door,
	C2_Fork(1-3), C2_Jalousie(),		Glass_El_Floor, Glass_El_FloorH(),
	C2_Knife(1-4), C2_Label_(),		Glass_P1, Glass_R1, Glass_R2,
	C2_Lamp, C2_Microwave,		Glass_Stairs(1-3), Glass_StairsB,
	C2_MicrowaveDoor, C2_Partition_D,		Glass_StairsC, Glass_StairsD,
	C2_Partition_U, C2_Scales(),		Glass_Table(1-3), Glass_Trans(2-3),
	C2_Screen, C2_Shelf(), C2_Sound,		Glass_Wall_2m, Glass_Wall_3m,
	C2_Spiracle(), C2_Table(),		Glass_Window
	C2_Teapot(), C2_Toster,		C_Stairs3_A1g, C_Stairs3_Ag,
	C2 WashingMachine, C2 Work()		C_Stairs3_B1g, C_Stairs3_Bg,
			C_Stairs3_C1g, C_Stairs3_Cg
OBJECTS (Materials)	(Meshes)		C2_Blender_Glass, C2_Dish3_Glass,
C2_Objects	C_Obj_Bottle, C_Obj_Bottles,		C2_Table_Door_Glass, C2_WM_Glass,
0,0000	C_Obj_Camera, C_Obj_Container,		C2_MicrowaveGlass, C_Obj_Cup,
	C_Obj_Containers, C_Obj_Cutlery2,	C EI	C_Obj_TestTube()
	C_Obj_Fork, C_Obj_Hold_A,	C_El	Glass_Elev, Glass_Elev1
	C_Obj_Holder(1-2), C_Obj_Knife,	C_Glass_0, C_Glass_min(),	Glass_Elevator
	C_Obj_Microscope, C_Obj_Monitor,	C_Glass_plus()	
	C_Obj_Microscope1, C_Obj_Netbook,		6. 1. 3
	C_Obj_Pad, C_Obj_Pen, C_Obj_Tools,	OUTSIDE-TOPDN-2 (Materials)	(Meshes)
	C_Obj_Spoon, C_Obj_Thermos,	C2_Outside2, C2_Outside2_Z	C2_Out2()

#### C\_Obj\_Thermoses, C\_Obj\_Tray

		WALLS (Materials)	(Mesnes)
OUTSIDE-TOPDN (Materials)	(Meshes)	C2_Walls_(0-5)	C_1Walls(), C_2Walls(),
C2_Misc	C_Misk_Aerial, C_Misk_AerialBase,		C_3Walls(), C_4Walls(),
	C_Misk_FoSup, C_Misk_SolarHolder,		C_Arche_(1-2), C_Walls_1,
	C_Misk_Foundation(),		C_Wall_Part_()
	C_Misk_GlassWallCorner,		
	C_Misk_SolarPanel		
C2_Outside_(1-2)	C_Out_Support, C_Out_TD_(1-4),		
	C_Out_Trans_(), C_Out_Wall_()		

# Heavy Station Kit DUGOUT Materials

DUGOUT / Materials /	DUGOUT / Meshes / Displays /	DUGOUT/Materials/	DUGOUT / Meshes / Type B Exterior /
N_Screens_A	N_Screens_A	N_BC_Out	N_B
N_Screens_BC	N_Screens_B, N_Screens_C		
N_Nozzle	N_Screens_S_15		DUGOUT / Meshes / Type BC Exterior /
N_Screens_S	N_Screens_S	N_BC_Out	N_BC
	DUGOUT / Meshes / Gaps /		DUGOUT / Meshes / Type C Exterior /
N_Gaps	N_Gaps_A, N_Gaps_B, N_Gaps_Unit	N_BC_Out	N_C
N_A_Out	$N_Solid_A$ , $N_Solid_A_C$ , $N_Solid_A_F$		
N_A_In	N_Solid_A		DUGOUT / Meshes / Type B Interior /
		N_BC_In	N_Bi
	DUGOUT / Meshes / Glass /		
N_Glass	N_G		DUGOUT / Meshes / Type BC Interior /
		N_BC_In	N_BCi
	DUGOUT / Meshes / Plates /		
N_Screens_P	N_DP		DUGOUT / Meshes / Type C Interior /
		N_BC_In	N_Ci, N_C_End_Pipeline
	DUGOUT / Meshes / Type A Exterior /		
N_A_Out	N_Ae		DUGOUT / Meshes / Type B Props /
		N_BC_Props	N_Bo
	DUGOUT / Meshes / Type A Interior /		
N_A_In	N_Ai, NA_Pipeline		DUGOUT / Meshes / Type BC Props /
		N_BC_Props	N_BCo
	DUGOUT / Meshes / Type A Props /		
N_A_Props	N_Ao, N_D, N_Crystal		DUGOUT / Meshes / Type C Props /
		N_BC_Props	N_Co
	DUGOUT / Meshes / Platforms /		
N_PL_Win	Win		DUGOUT / Meshes / Type S /
N_PL	All (Except Win)	N_S_Out_In	N_Sg
			DUGOUT / Meshes / Type S Props /
		N_S_Props	N_So

# Heavy Station Kit POWER-UPS Materials

POWER-UPS / Materials /	POWER-UPS/ Meshes /
HSK_PU_Items	HSK_PU_11 HSK_PU_46
HSK_PU_Spawn	HSK_PU_0, HSK_PU_0_2
HSK_PU_Spawn_0G	HSK_PU_0_1
HSK_PU_Spawn_A	HSK_Spawn
HSK_PU_Spawn_A_E	HSK_Spawn_E, HSK_PU_Plate
HSK_PUA	HSK_PUA_11 HSK_PUA_44

### **SCRIPTS**

## Customize Prefabs (scripts settings)

#### General info

All asset classes placed in common namespace **DotTeam.HSK**. All script files are located in the corresponding subfolders of the **Assets > Heavy Station Kit > \_common > Scripts** folder.

### **Doors & Gate2**

Refers to prefabs	
HSK Base	B2_Door  Assets > Heavy Station Kit > BASE > Prefabs > Doors
HSK Colony	<b>C2_Door</b> Assets > Heavy Station Kit > COLONY > Prefabs > Door_Window
HSK Hangars	H2_Door, H2_Gate2 Assets > Heavy Station Kit > HANGARS > Prefabs > Doors
HSK Dugout	DBCI_II_Door_HSK  Assets > Heavy Station Kit > DUGOUT > Prefabs > Type BC Interior

**Door / Gate2** Prefabs allows switching the operating modes of the door/gate in Edit and Game modes via public property *Mode* of **DotHskDoor** Script component attached to top-most Prefab game object, including:

Active	the door/gate is opening and closing automatically, at the approaching of a Player (gates are manually operated using the console). Initially, the door/gate is closed. Sound is being played, and opening and closing sounds of the panel sliding differ
Active Open	before the first pass, the doors/gates remain open (gate initially is open), after which the doors/gates continue to work in the same way as in Active mode
Blocked	the door/gate is closed. Sound of "the closed door" is being played, at approaching of a Player
Inactive Open	the door/gate is disabled, being fully open
Inactive Closed	the door/gate is disabled, being fully closed
Broken Open	the door/gate is disabled, being almost fully open
Broken Closed	the door/gate is disabled, being almost fully closed

Selecting of the door/gate operating mode is instant (happening immediately). In the Game mode the doors are automatically triggered when the character approaches.

Useful public properties of <b>DotHskDoor</b> class	
dotHskDoorMode <b>mode</b>	Allows set/read door operating mode, setting mode is instant - happening the next Update cycle.  Acceptable values are <i>dotHskDoorMode.{mode_id}</i> , where <i>mode_id</i> is one of following literals: <i>active</i> , <i>blockea</i> , <i>inactiveOpen</i> , <i>inactiveClosea</i> , <i>brokenOpen</i> , <i>brokenClosea</i> (see description of operating modes above).
Gate2 prefab only: DotHskDoorHangarsGate2Console script (attached to Console_Trigger GameObjects, childs of Console1 and Console2 GameObjects)	
Texture Banner	On-screen hint image (source file <b>HSK_Gui.psd</b> included in <u>Assets &gt; Heavy Station Kit &gt; _common &gt; Textures &gt; GUI</u> )

## Gate

Refers to prefabs	
HSK Hangars	GW_LargeGate, GW_SmallGate
	Assets > Heavy Station Kit > HANGARS > Prefabs > Gateway

Gate Prefab allows switching the operating modes of the gate in Edit and Game modes via public property *Mode* of **DotHskGate** Script component attached to the top-most Prefab game object. Gate prefab operates in the same manner as Gate2 prefab (see "Doors & Gate2" section) and its operational modes are including the same values as Gate2.

Useful public properties of <b>DotHskGate</b> class	
dotHskGateMode <b>mode</b>	Allows set/read gate operating mode, setting mode is instant - happening the next Update cycle.  Acceptable values are dotHskGateMode.{mode_id}, where mode_id is one of the following literals: active, blocked, inactiveOpen, inactiveClosed, brokenOpen, brokenClosed (see list of operating modes in "Doors & Gate2" section).
bool <b>isFullyOpen</b>	Equals <i>true</i> if the Gate is completely open at this time, otherwise - <i>false</i>
bool <b>isFullyClosed</b>	Equals <i>true</i> if the Gate is completely closed at this time, otherwise - <i>false</i>
bool <b>isStopped</b>	Equals <i>true</i> if the Gate is not moving at this time, otherwise - <i>false</i>
<b>DotHskGateHangarsConsole</b> sc	ript (attached to Console_Trigger GameObjects, childs of Console1 and Console2 )
Texture OpenTip, CloseTip	On-screen hint images (source file <b>HSK_Gui.psd</b> included in <u>Assets &gt; Heavy Station Kit &gt; _common &gt; Textures &gt; GUI</u> )

## **Door's Consoles**

Refers to prefabs	
HSK Base	B2_Cons_Mode, B2_Cons_Power
	Assets > Heavy Station Kit > BASE > Prefabs > Equipment

There are two types of Console prefabs:

Prefab B2\_Cons\_Power - "the Power console" allows for choosing if the door/gate is either operating properly or inactive;

Prefab B2\_Cons\_Mode – "the Mode console" allows for choosing if the door/gate is either Active or Blocked.

### TIPS

- · Consoles can manage all types of HSK Base, Colony, Dugout and Hangars Doors and HSK Hangars Gate2 (H2\_Gate2) Prefabs simultaneously.
- Both consoles **B2\_Cons\_Power** and **B2\_Cons\_Mode** aren't available for manipulation if the first door in theirs *ControlledDoors* list has mode either *brokenOpen* or *brokenClosed*.
- The Console B2\_Cons\_Mode does not work if the first door in the ControlledDoors list has mode either inactiveOpen or inactiveClosea.

### SETTING UP THE CONSOLE

- 1. Attach the script **DotHskDoorContro** ( <u>Assets > Heavy Station Kit > \_common > Scripts > Doors > DotHskDoorControl.cs</u> ) to all instances of the door prefab, which you would like to manipulate.
- 2. Set *DotHskDoorControl* script parameters:
  - 2.1. OpenIfPowerOf1 to true for the door that you would like automatically opened if the power will go down.
- 3. Specify *PowerOnStatus* so after the Power is restored doors will get:

blocked	the doors will get locked, and the Red light will signalize that
active	the doors will get unlocked, and the Green light will show this
previous	the doors will get into their previous state when the Power went off. If initially inactive, then the value set at <b>BlockedByDefault</b> parameter will be used

- **4.** Specify all the doors/gates to be controlled via this particular console, using the *ControlledDoors* parameter (of the **DotHskDoorConsole** script, which is attached at the instance of the console prefab). The same doors/gates can be placed to *ControlledDoors* list of many consoles.
- 5. Check the *ConsoleList* parameter of the **DotHskDoorControl** script, for there should be all the consoles that are controlling this door. Please do not edit this list, because it is automatically made.

#### TIPS

To set a mode for multiple doors which are handled by single console, specify the mode of the first door in the *ControlledDoors* list. If necessary, multiple consoles can manage one door and a single console can manage many doors. If having such a tricky situation, please keep in mind:

- the mode of the first door in the *ControlledDoors* list is displayed by the console, and only the mode of the first door in that list is taken into account when switching modes;
- · all the consoles that handle the same doors are equal in functionality.

Be careful at making complex door control configurations. If set up incorrectly, some doors may get into unexpected modes.

If the doors are operated by console, it is recommended to switch their mode using the following methods of the **DotHskDoorControl** script attached to the first door/gate object in the **ControlledDoors** list:

void SetPowerMode( bool isOn	Allows to switch on/off the Power of the door. For each door, this method saves and restores its stance "active/blocked" and considers the value of the parameter <i>OpenIfPowerOfl</i> .
)	Acceptable values for <i>isOn</i> parameter are bool <i>true</i> (for turning the power on) or bool <i>false</i> (for turning the power off).
void SetMode( dotHskDoorMode <b>mode</b>	Allows doors/gate blocking and unblocking. The method can set off any of the available modes; however, for switching the power on/off, it is recommended using <b>SetPowerMode()</b> method.
)	Acceptable values are <i>dotHskDoorMode.{mode_id}</i> , where <i>mode_id</i> is one of following literals: <i>active</i> , <i>blocked</i> , <i>inactiveOpen</i> , <i>inactiveClosed</i> , <i>brokenOpen</i> , <i>brokenClosed</i> (see list of operating modes above).
<b>DotHskDoorConsoleCollider</b> script	(attached to Console_Trigger GameObject)
Texture Banner	On-screen hint image (source file <b>HSK_Gui.psd</b> included in <u>Assets &gt; Heavy Station Kit &gt; _common &gt; Textures &gt; GUI</u> )

## Elevator

Refers to prefabs	
HSK Colony	C_El_Platform, C_El_Platform2 Assets > Heavy Station Kit > COLONY > Prefabs > Elevator

#### SETTING UP THE ELEVATOR

1'st Step. Place the Platform (Cabin) of the Elevator in the scene.

#### TIPS

Two platform types are available and they differ by pre-installed consoles:

- The platform C\_EL\_Platform is using console C\_EL\_Console, which provides keyboard input for selecting specific floor, and for selecting underground level stories an additional modifying button should be used.
- The platform **E\_EL\_Platform2** is using console **C2\_EL\_Cons2**, which shows list of the available floors on the graphical panel, and allows selecting of the required floor using mouse button via "touchscreen".
- Tip: While operating touchscreen elevator console "C2\_EL\_Cons2" Player may have an item in their hands. Usually, the use of console behaves through pressing the same button, which is binded for use of an item in the hands of the Player if that is the case, you can add callback-functions (see the "Recommended Specific solutions" Easy FPS section below)

2'nd Step. Place Consoles of the Elevator on all floors and at the Platform of the Elevator.

#### TIPS

Coordinate at Y axis of the Console's origin point is used for positioning Platform of the Elevator on according floor.

3'rd Step. Script setup

### **A.** Main settings (script DotHskElevator2, assigned as child component to Platform Object):

- 1) Optional, only for custom (non C\_El\_Platform or C\_El\_Platform2) platforms:
  - Assign to property "Platform" Platform object.
  - Attach Platform Console:
    - for C\_El\_Console assign to property "Platform Console" of DotHskElevator2 script Console object that is placed at the Platform of the Elevator.
    - of or C2\_El\_Cons2 assign Platform object (C\_El\_platform2) to property "Elevator 2" of DotFPCElevator2ConControl script attached to C2\_El\_Cons2 prefab.
- 2) Set number of Floors of Elevator at property "Size" of list "Floors" and to each element of the list:
  - Assign appropriate Console objects to property "Console"
  - At "Elevator Label" property set a symbolic ID code of Elevator title for displaying on digital panel (only for C\_EL\_Platform2)

#### TIPS

At Console assignment, readonly "Floor Height" property of an appropriate element of list "Floors" shows the height of the floor (Y-axis).

Using slider bar "Floor Number" for each element set hotkey for selecting Floor number at Console of Elevator.

#### TIPS

At configuring script while in Edit Mode, numbers of floors are automatically modified, so they stay unique;

Supported range of the number of floors is from "-9" to "9". While in game, hold modifier key (by default "Shift", can be changed via DotControlCenter prefab) to type in Negative, or in other words, Underground floor number.

- At the "Floor title" property set floor title for displaying on a digital panel (only for **C\_EL\_Platform2**).
- 3) At the "Current floor" property set floor, on which Platform of Elevator will be at start of the game. So the platform should move to such floor.

#### TIPS

At this property should be assigned an index of the appropriate element from the "Floors" list. This differs from the actual floor number.

4) Set platform movement speed at the property "Platform Speed".

## **B.** Optional - customize movement sounds (script DotHskElevator2, assigned as child component to Platform object of the Elevator):

- 1) Assign to property "Platform Sound Source" AudioSource object, attached at Platform of the Elevator.
- 2) Assign at "Start Sound", "Motion Sound" and "Stop Sound" properties AudioClip with corresponding sounds, such as starting, movement and stop.

#### TIPS

Duration of AudioClip "Start Sound" defines the amount of time that takes Elevator to accelerate, and "Stop Sound" - braking of Elevator till stopping.

## C. Optional - customize Displays of Consoles (script DotHskElevator2Events, assigned as child component to Platform object of the Elevator)

- 1) Assign to property "Display Up Mat" material for the upper display of the console, which shows the number of the current floor at standby mode as well as at movement of the Platform.
- 2) Assign to property "Display Dn Mat" material for the bottom display of the Console at Floors, which shows the state of the Elevator "Movement up", "Movement down" or "Standby".
- 3) Assign to property "Display Dn Platform Mat" material for the bottom display of the Console at Platform, which shows the number of the desired floor while Elevator is running.

#### TIPS

Every elevator that is placed within the scene, **must use a separate set of materials for displays**. Because for showing identical information at Consoles script is modifying property sharedMaterial of Renderer object. Detailed information on preparing materials for Displays and configuring the **DotAnimatedTexture** script can be found in the "Displays" section below.

Useful public properties & methods of <b>DotHskElevator2</b> class	
<i>int</i> currentFloor	The Property contains the internal number of the current floor, to move the elevator platform use the method call()
bool call(int floor)	"Call" elevator platform to specified <i>flooi</i> , the method will return <i>false</i> if action can't perform
Texture CallElevatorTip, EnterFloorTip	On-screen hint images (source file <b>HSK_Gui.psd</b> included in <u>Assets &gt; Heavy Station Kit &gt; _common &gt; Textures &gt; GUI</u> )

## **D.** Optional – attach callback routines

Attach callback routines for events, arising when graphical panel (console C2\_EL\_Cons2) activated when the player approaches the console and deactivated when the player moves away from the console (script DotHskElevator2ConControlCol, assigned as child component to C\_El\_Collider - child of graphical panel console C2\_El\_Cons2), see example in chapter "Third-party Character Controller Requirements" below

Useful public properties & methods of <b>DotHskElevator2ConControlCol</b> class	
UnityEvent OnDisplayActivated The property contains callback procedures that are called when the graphic panel is activated*	
UnityEvent OnDisplayDeactivated	The property contains callback procedures that are called when the graphic panel is deactivated*

<sup>\*</sup> Create callback procedures as script methods attached to some GameObject in the scene and assign them to the specified properties

## Shuttle

HSK Dugout kit contains a set of prefabs that implement the functionality of character-controlled shuttles of various designs, including:

Refers to prefabs (HSK Dugout kit only)	
Shuttle Assets > Heavy Station Kit > DUGOUT > Blueprints > Shuttle Systems	Shuttle frame  Base shuttle prefab - contains the shuttle frame with connected main control scripts
DBPS_II_Cons_0, DBPS_II_Cons_1, DBPS_II_Cons_2, DBPS_II_Cons_3	Console
Assets > Heavy Station Kit > DUGOUT > Blueprints > Shuttle Systems	Control console for activating the shuttle control mode
DBPS_EE_Turb_L, DBPS_EE_Turb_Left, DBPS_EE_Turb_Left1, DBPS_EE_Turb_Right, DBPS_EE_Turb_Right1, DBPS_EE_Turb_S  Assets > Heavy Station Kit > DUGOUT > Blueprints > Shuttle Systems	Turbine  Several variants of animated jet turbines working in conjunction with the shuttle controller
DBPS_EE_Chas_0, DBPS_EE_Chas_1, DBPS_EE_Chas_2 Assets > Heavy Station Kit > DUGOUT > Blueprints > Shuttle Systems	Chassis Several variants of animated chassis
Follow Camera  Assets > Heavy Station Kit > DUGOUT > Blueprints > Shuttle Systems	Follow Camera  Follow camera for organizing the user interface when controlling the shuttle

### SETTING UP THE SHUTTLE

1'st Step. Place the prefab Shuttle in the scene and build the shuttle body from the components of the DUGOUT and other HSK packages, place the interior elements, install the landing chassis, turbines and control consoles, adhering to the following rules:

- 1) all elements of the shuttle structure, including turbines, chassis and static cameras, should be placed in the **Shuttle Model** container, and it is desirable to place static cameras in the **Static Cameras** folder.
- 2) all Follow Cameras must be placed outside the Shuttle Model container, it is recommended to place them in the Follow Cameras container.
- 3) If it is necessary to organize remote control of an unmanned shuttle from the ground, the corresponding control console should be located outside the **Shuttle Model** container.

2'nd Step. Add to the Flight Colliders object the minimum number of Sphere, Capsule or Box Colliders needed to roughly represent the fuselage shape. These colliders are necessary for physical interaction with other objects in the scene at the time of flight, since at this time all other colliders attached to Objects in the Shuttle container are disabled.

3'rd Step. Script settings

- 1) DotHskShuttleSupports (attached to Shuttle Model object in Shuttle prefab)
  - Attach first person controller (FPC\_Player prefab) to Person Controller property
  - Attach shuttle turbines to array Turbines property

- · Attach shuttle chassis to array Chassis property
- Attach all (static and follow) cameras to array property Cameras:
  - to item Camera attach object with Camera component
  - to item **Listener** attach object with **AudioListener** component
  - o in the Hot Key item set a hotkey that will activate the corresponding camera
- 2) DotHskShuttleFollowCamera (attached to Follow Camera prefab)
  - Attach Shuttle Model object (Shuttle prefab) to property Target
- 3) DotHskShuttleTurbine (attached to turbine prefab)
  - Adjust (if necessary) the **Place** and **Location** properties, see the **DotHskShuttleTurbine** script below for details.
- 4) DotHskShuttleCollider (attached to Trigger object of DBPS\_II\_Cons\_{N} prefab)
  - Attach topmost **Shuttle** container object (with **DotHskShuttleController** script attached) to **Shuttle Controller** property.
- 5) FPC\_Shuttle (<u>Assets > Heavy Station Kit > common > Scripts > FPC > FPC\_Shuttle.cs</u>)
  - Attach FPC\_Shuttle script to FPC\_Player object.

## Shuttle scripts overview

A) DotHskShuttleController class provides the main shuttle functionality - handling user input and flight control

<b>DotHskShuttleController</b> class		
General settings Section		
Rigidbody <b>Model</b>	Reference to <b>Shuttle Model</b> object with <b>Rigidbody</b> attached	
	Hot Keys Section	
KeyCode SwitchEngine (Z)	Hot key to turn on / off jet turbines	
KeyCode <b>Quit</b> (X)	Hot key to exit flight control mode	
KeyCode <b>Forward</b> (W)	Hot key for moving forward	
KeyCode TurnLeft (A)	Hot key for turning left	
KeyCode Backward (S)	Hot key for backward movement	
KeyCode TurnRight (D)	Hot key for turning right	
KeyCode StrafeLeft (Q)	Hot key to strafe to the left	
KeyCode StrafeRight (E)	Hot key to strafe to the right	
KeyCode <b>Upward</b> (Space)	Hot key for takeoff up	
KeyCode <b>Downward</b> (Left Ctrl)	Hot key hotkey for going down	
<i>float</i> <b>TurnForce</b>	The force applied to the model when turning	
	Forces Section	
float ForwardForce	The force applied to the model when moving forward (backward)	
float ForwardTiltForce	Force of downward tilt of the shuttle bow when moving forward	
float TurnTiltForce	Lateral tilt force of the shuttle when turning and / or strafe	
float StrafeForce	The force applied to the model when strafe	
float <b>LiftForce</b>	Force applied to the model when going up and / or going down	
float FreeFallForce	The force of "gravity" applied to the model in free fall when the engines are turned off	
float TurnTiltForcePercent	Percentage of tilt power when turning	
	Wiggling Section	
float WiggleAmplitude	The angular amplitude of the shuttle tilts when wiggling. The shuttle tilts between 50% and 100% of the specified amplitude	

float WiggleDuration	Oscillation period of wiggling, sec	
float WiggleDelay	Delay from the last press of any control key until the shuttle enters wiggle mode, sec	
float WiggleMinHeight	The minimum height of the shuttle hovering above the surface, starting from which the wiggling mode can be activated	
	Miscellaneous Section	
<i>float</i> FreeFallHeight	The height of the shuttle above the surface during downward movement, below which the descent speed begins to be limited. This prevents the shuttle structural elements from falling under the surface upon landing	
	Other public properties and methods	
bool Operate	R/W Property. Activates (true) or deactivates (false) shuttle control mode. When the shuttle control mode is activated, the character controller is disabled and the shuttle control interface is activated	
bool EngineAct	R/o property. Contains "true" if engines are activated and "false" otherwise	
bool OnGround	R/o property. Contains "true" if the shuttle is on the surface (on ground) and "false" otherwise	
OnChangeStatus changeStatus	R/o property. Contains "true" if the shuttle is on the surface (on ground) and "false" otherwise  R/W Property. Callback (delegate) that is activated when the shuttle status changes, declared as  public delegate void OnChangeStatus(Rigidbody rb, HSKShuttleStatus param, Vector4 control), where  • rb – Ridgitbody of shuttle  • param – type of event (enum HSKShuttleStatus):  • stNone – no events  • stBegin – activate shuttle control interface  • stEnd – deactivate shuttle control interface  • stStart – start engine  • stStop – stop engine  • stControl – user input received  • control – array (Vector4) of user input:  • item 0 / x – Turn Left / Right  • item 1 / y – Forward / Backward  • item 2 / z – Upward / Downward	

B) **DotHskShuttleCollider** class provides operation of shuttle console (activation of the shuttle control mode) and displaying the GUI prompts

DotHskShuttleCollider class	
DotHskShuttleController ShuttleController	Reference to the topmost shuttle container object with an attached <b>DotHskShuttleController</b>
KeyCode Interact	Hotkey to activate the shuttle control mode
Texture2D shuttleControlStartTip, shuttleEngineOnTip, shuttleFlightModeTip	Images for corresponded GUI prompts
bool DisplayGUIMenu	If true, then GUI prompts are displayed, does not apply to the <b>shuttleControlStartTip</b> prompt, which is displayed when the character interacts with the control console

C) DotHskShuttleSupports class, provides control of turbines, chassis and cameras, and is also responsible for interacting with the character controller

<b>DotHskShuttleSupports</b> class	
DotHskShuttleController ShuttleController	Reference to <b>Shuttle</b> container object with <b>DotHskShuttleController</b> script attached
GameObject PersonController	Reference to <b>FPC_Player</b> object (first person controller)
KeyCode ToggleChasis (C)	Hotkey for opening / closing the chassis
List <dothskshuttleturbine> Turbines</dothskshuttleturbine>	List of references to <b>Turbine</b> objects with <b>DotHskShuttleTurbine</b> script attached
List <dothskmov> Chasis</dothskmov>	List of references to <b>Chassis</b> container object with <b>DotHskMov</b> script attached
List <dothskshuttlecamera> Cameras</dothskshuttlecamera>	List of references to <b>Camera</b> game object with <b>Camera</b> component attached

D) **DotHskShuttleTurbine** class provides control over the audio-visual effects of the turbine operation – rotation, humming and flame display

**DotHskShuttleTurbine** class

Transform <b>Item</b>	Reference to the <b>Transform</b> component of the rotating part of a jet turbine	
Renderer NozzleRenderer	Reference to game object with <b>Renderer</b> of turbine Nozzle attached	
AudioSource SoundSource	Reference to game object with attached Turbine <b>AudioSource</b>	
AudioClip StartSound, MoveSound, StopSound	Audio clips for, respectively, starting, working and stopping noise f the turbine	
Light NozzleLight	Reference to Nozzle light source	
DotHskTurbinePlace <b>Place</b> DotHskTurbineLocation <b>Location</b>	Place of the turbine on the shuttle fuselage, affects the tilt of the turbine in the process of changing the direction of flight, allowable values:	
Dominic Director Location	Place – static, left, right	
	Location - middle, front, rear	
	Turbine with <b>Place</b> set to "static" remains stationary. In general, the <b>Place</b> value affects all types of movement, and <b>Location</b> value affects the strafe	
bool <b>PlaySounds</b>	If <b>true</b> , turbine noise will be reproduced	
float <b>BackwardAngle,</b> ForwardAngle, VerticalAngle, IddleAngle	Boundary rotations of the turbine in appropriate situations	
float <b>Responsivity</b>	Turbine rotation speed	

**Note**. The source file **HSK\_DUGOUT\_FONT.psd** with sample font for the shuttle displays and source file **HSK\_Shuttle\_GUI.psd** with on-screen hints with shuttle modes are included in the <u>Assets > Heavy Station Kit > common > Textures > GUI</u> folder.

# Ladder

### **SETTING UP THE LADDER\***

- 1. Attach control script (**FPC\_Ladder** class) to **FPC\_Player** GameObject.
- 2. Assign tag Ladder2 to all GameObjects that have Ladder Colliders attached to.

Refers to prefabs	
HSK Base	Ladder1, Ladder2
	Assets > Heavy Station Kit > BASE > Prefabs > Ladders
HSK Hangars	GW_Ladder
	Assets > Heavy Station Kit > HANGARS > Prefabs > Gateway
HSK Colony	C_Basin_Ladder
	Assets > Heavy Station Kit > COLONY > Prefabs > Floors
	C_Vent_4m, C_Vent_9m
	Assets > Heavy Station Kit > COLONY > Prefabs > Ventilation
HSK Dugout	DAI_EE_Ladder_0, DAI_EE_Ladder_1
	Assets > Heavy Station Kit > DUGOUT > Prefabs > Type A Interior
	DBCP_II_Ladder
	Assets > Heavy Station Kit > DUGOUT > Prefabs > Type BC Props
	DSP_II_Ladder
	Assets > Heavy Station Kit > DUGOUT > Prefabs > Type S Props

#### Useful public properties of FPC Ladder class

*Texture* tipOnLadder, tipOffLadder

On-screen hint images (source file HSK\_Gui.psd included in Assets > Heavy Station Kit > \_common > Textures > GUI)

# Other animated prefabs

Refers to prefabs		
HSK Dugout kit		
DAI_II_Stairs_Uni	Swivel gangway	Assets > Heavy Station Kit > DUGOUT > Prefabs > Type A Interior
DAI_II_End_Vent_Door, DAI_II_End_VentS_Dn, DAI_II_End_VentS_Up	Ventilation grill	
DBI_II_End_Vent	Ventilation grill	Assets > Heavy Station Kit > DUGOUT> Prefabs > type B Interior
DCI_II_End_Vent	Ventilation grill	Assets > Heavy Station Kit > DUGOUT > Prefabs > type C Interior
DAP_EE_Radar	Rotating radar	Assets > Heavy Station Kit > DUGOUT > Prefabs > Type A Props
DBCI_II_Hatch_HSK	Sliding hatch	Assets > Heavy Station Kit > DUGOUT > Prefabs > Type BC Interior
DBCP_II_Fan	Industrial fan	Assets > Heavy Station Kit > DUGOUT > Prefabs > Type BC Props
DBCP_II_Switch1, DBCP_II_Switch2	Switches	
DS_Door	Doors with folding ladder	Assets > Heavy Station Kit > DUGOUT > Prefabs > Type S Props
DSP_II_Capsule_1, DSP_II_Door_Left , DSP_II_Door_Right, DSP_II_Storage_x, DSP_II_WC, DSP_II_WC&Shower etc	Animated furniture and plumbing fixtures	
DBPS_EE_Chas_0 2	Shuttle Chassis	Assets > Heavy Station Kit > DUGOUT > Blueprints > Shuttle Systems
		HSK Colony kit
C_Vent_Grid	Ventilation grill	Assets > Heavy Station Kit > COLONY > Prefabs > Ventilation

### The prefabs listed above are controlled by the universal **DotHskMov** script

Public properties of <b>DotHskShuttleSupports</b> class		
dotHskDoorMode <b>mode</b>	Operating mode (see list of operating modes in "Doors & Gate2" section)	
<i>int</i> repeatMotion	If <b>0</b> – movements are automatically repeated in an endless loop, if <b>1</b> or more – the movements are initiated by script and repeated the specified number of times	
bool reverseOddCycles	If <b>true</b> – movement performed in the opposite direction in every odd cycle	
float <b>delay</b>	Pause between movement cycles, sec	
float motionTime	Duration of one cycle of movement (excluding the pause)	
List <dothskmovflap> movFlaps</dothskmovflap>	List of animated object elements	
float almostOpenPosition	Flaps position in "Broken open" state (0 – fully closed, 1 – fully open)	
float almostClosedPosition	Flaps position in "Broken closed" state (0 – fully closed, 1 – fully open)	

#### A helper class that implements the functionality of a separate moving element

Public properties of dotHskMovFlap class		
Transform <b>flap</b>	Refer to Transform component of Flap object	
Vector3	Position and rotation of Flap in "Open" state	
openPosition, openRotation		

<sup>\*</sup>Settings mentioned above allow for a link between Ladders and class **FPC**, which are part of **Heavy Station Kit Asset**.

Vector3 closedPosition, closedRotation	Position and rotation of Flap in "Close" state
/nt turnStep	Angle of rotation for one phase of rotation. If the specified angle is less than 10 degrees, the number of rotation phases is calculated automatically. Phase breakdown of the rotation cycle is performed to ensure smooth rotation.

# First Person Character Controller

Refers to prefabs	
ALL Kits	FPC <u>Assets &gt; Heavy Station Kit &gt; _common &gt; Frefabs</u>

**FPC** class is a simple First Person Character Controller class. **FPC** class is independent from deprecated Unity Standard Assets and provides support for all the original functionality implemented in the **Heavy Station Kit** assets.

Useful public properties of <b>FPC</b>	Cclass		
	"Speed" section		
float walkingSpeed	Regular rate of horizontal movement		
float runningSpeed	Increased rate of horizontal movement (hold "Shift" by default); has impact on crouch movements		
float climbingSpeed	Ladder movement rate		
floatjumpSpeed	Jumping rate of movement; has impact on crouch movements		
	"Look" section		
float lookSpeed	Rate of Camera rotation		
float lookXLimit	Scope of Camera rotation		
	"Features" section		
float crouchSpeedRatio	relation of crouching speed to regular		
float crouchHeightRatio	relation of crouched Character Controller height to regular		
	"Climbing" section		
bool climbingAutoStart	If True, allows to climb once in Ladder Collider area; else interaction starts by a key ("E" by default)		
	Other Settings		
bool canMove	If False (default True), Player can only sit, look and to be subjected under the effects of gravity.		
float gravity	Gravitational Force		
Camera playerCamera	Player Camera		

# **Dot Control Center**

Refers to prefabs	
ALL Kits	DotControlCenter  Assets > Heavy Station Kit > _common > Frefabs

The DotControlCenter prefab is made to be a convenient center for centralized control of the general settings of other prefabs from **Heavy Station Kit** set either in an active scene or in the entire application.

Place *DotControlCenter* prefabs in every scene, if it is necessary to control settings of the prefabs individually. On the other hand, to control settings in the entire application place *DotControlCenter* prefab in the starting scene of the project and tick checkbox "Use in Other Scenes".

List of parameters available for setup:

Shortcuts	
InteractShortcut*	"One-buttoned" interaction (default - "E" key)
CrouchShortcut	Toogling character mode to Crouch/Walk (default - "C" key), applied for FPC prefab
FlashlightShortcut	Turning flashlight either ON or OFF (default - "L" key), applied for <i>FPC</i> prefab

Shortcut modifiers	
Basement Floors ModifierKey 1, Basement Floors ModifierKey 2	Modifier buttons to input negative floor number on floor selection console of the Elevator, and is used in conjunction with keys "1""9" to form an appropriate negative variant "-1""-9" (default -"Left shift" and "Right shift" keys), applied for C_EL_Platform
Settings	
Use In Other Scenes	If the check mark is set, the <b>DotControlCenter</b> object will not be destroyed when a new scene is loaded
Track Changes Settings	If the check mark is set, the settings changes will be tracked and applied in each update application cycle

<sup>\*)</sup> With the modification of InteractShortcut it would be obvious to update corresponding on-screen hints. Graphical source file HSK\_Gui.psd included in Assets > Heavy Station Kit > \_common > Textures > GUI

## **Displays**

Refers to prefabs	
ALL Kits	Assets > Heavy Station Kit > BASE / HANGARS / COLONY / DUGOUT > Prefabs > Displays

Displays use **DotAnimatedTexture** Script, designed for cycled playback of single or multiple frame sequences assigned to the material.

#### Prepare material

Recommendations for material creating and setup:

- 1. Frame sequences must be inside textures. And then you put the textures in the Main Maps section of the Material.
- 2. The size of the texture should provide optimal space for all of the frame sequences.
- 3. Positioning of frame sequences on the texture map is done in the following order from left to right and from top to bottom. So at first, the row is being made, then other rows add, filling texture map to the bottom.
- 4. Setup for parameter Tiling for Main Maps:
- X = 1.0f/{columns\_count}, where {columns\_count} is a number of frames that are placed horizontally;
- **Y = 1.0f / {rows\_count}**, where {rows\_count} is a number of frames that are placed vertically.

#### SETTING UP THE SCRIPT

- 1. After the material was assembled, assign it to the desired object.
- 2. To the same object, script **DotAnimatedTexture** is being attached. Script's parameter **Material Total Frames** is set automatically for a maximum number of frames that can be in the material. The chosen number of frames depends on the values of the **Tiling** parameter for **Main Maps**.
- 3. General script configuring:

Active Sequence – the number of current sequence for playback (zero-based);

Size in Sequences tab – total number of frame sequences in the animated material;

FPS – number of frames per second on playback;

Show warnings – allows for displaying errors in Console if configuring the script in EditMode (Disabled by default)

4. Individual setup of single or multiple frame sequences, on tab "Element N" of the "Sequences" tab.

Total Frames – total number of frames of this particular frame sequence;

First Frame – first frame number, of this particular frame sequence element, in relation to the first frame number on the Material (zero-based);

Starting Frame – sequence playback starts with this frame (zero-based);

Randomly — if checked, frames to playback will be chosen on random.

#### **Notes**

- 1. At script setup in EditMode, animated material shows the starting frame (parameter **Starting Frame**) of selected sequence (parameter **Active Sequence**). This allows for a visual preview of animated material. Frame sequence cannot be run in EditMode, for this select GameMode.
- 2. For switching between frame sequences inside of Script in GameMode it is necessary to assign sequence number (zero-based) to public property activeSequence of an appropriate DotAnimatedTexture script component.
- 3. Please keep in mind that, if making a Prefab from an Object with the already attached script, then assigned material will drop out of Prefab. Restoring material is possible within the Inspector, selecting Prefab in Project window and assigning material manually. Then, for preview picture of Prefab to display correctly, it is advised performing Reimport.

#### Recommended

# General settings for 3rd party FPC

to work with Heavy Station Kit

(For **Opsive UFPS 2.0** and **Easy FPS** see the **Specific solutions** below)

- 1. Character collider should not exceed 1.8m in height and 0.7m in diameter.
- 2. For most scripts to respond (interaction with the elements of Heavy Station Kit Asset like Doors, Consoles, etc), tag Player must be set either in Character Controller collider or in any of its parent Game Objects.
- 3. Elevator display console C2\_El\_Cons2 (included in Heavy Station Kit colony asset) requires tag MainCamera set in player camera.
- **4.** To use Ventilation 3<sup>rd</sup> party FPC must support crawling or crouching. Additional requirements are height of player collider <0.8m, height of player camera <0.65. Size of vent unit is 1m x 1m.
- 5. To use Ladders (including ventilation ladders) 3<sup>rd</sup> party FPC must support that.
- 6. To avoid falling through in narrow space parameter Clipping plane: Near must be set at lowest point 0.01m.

#### Recommended

# **Specific solutions**

for Heavy Station Kit to work with **Opsive UFPS 2.0** and **Easy FPS** 

## **Opsive UFPS 2.0**

https://assetstore.unity.com/packages/templates/systems/ufps-ultimate-fps-106748

**Issue:** All UI elements of UFPS got added to console display C2\_El\_Cons2 instead of main screen, after adding UFPS UI to scene which has console display.

**Solution:** It happens because C2\_El\_Cons2 has CANVAS and UFPS2 script applies UI to first CANVAS it can find. Simply **temporarily disable** all Elevators which has C2\_El\_Cons2 *mounted on E\_EL\_Platform2* **before** adding UI *(Tools \rightarrow Opsive \rightarrow Ultimate Character Controller \rightarrow Main Manager \rightarrow Setup \rightarrow UI Setup \rightarrow Add UI).* Don't forget to **enable all Elevators back** when UI was added.

**TIP:** Out of the box UFPS doesn't support **Crawling** (*Ventilation*) and **Climbing** (*Ladder*). Yet you can use their documentation to implement that features yourself at:

https://opsive.com/support/documentation/ultimate-character-controller/character/abilities/new-ability/

## **Easy FPS**

https://assetstore.unity.com/packages/3d/characters/humanoids/easy-fps-73776

**Issue:** While operating touchscreen elevator console "C2\_EL\_Cons2" Player may have an item in their hands. Usually, the use of console behaves through pressing the same button, which is binded for use of an item in the hands of the Player - the possible solution to add a script and to attach methods:

### **Solution Step 1**

Attaching script. Simply add script listed below to any GameObject within scene, (or include the code to existing script):

```
using UnityEngine:
class ElevatorDisplayToggle: MonoBehaviour {
  public GameObject playerObject = null;
  private GunInventory playerScript = null;
  private bool currentGunState = true;
  public void Start() {
    if( playerObject != null ) { playerScript = playerObject.GetComponent<GunInventory>(); }
  public void OnDisplayActivated() {
    // Some code that is executed when the character approaches the display console
    if( (playerScript != null) && (playerScript.currentGun != null) ) {
      currentGunState = playerScript.currentGun.activeSelf;
      playerScript.currentGun.SetActive(false);
  public void OnDisplayDeactivated() {
    // Some code used when moving a character away from the display console
    if( (playerScript != null) && (playerScript.currentGun != null) ) {
      playerScript.currentGun.SetActive(currentGunState);
 }
```

### **Solution Step 2**

Attach **methods** OnDisplayActivated() / OnDisplayDeactivated() to graphic display console collider (ELEVATOR game object  $\rightarrow$  C\_El\_Platform2 game object  $\rightarrow$  C\_El\_Collider game object  $\rightarrow$  DotHskElevator2ConControlCol Script component  $\rightarrow$  On Display Activated () / On Display Deactivated properties)

# **Installation Guidelines**

- **Step 1**. Create clean 3D Project / Color Space Linear (Recommended).
- **Step 2**. Install Unity Post Processing Package (Window Package Manager Post Processing Install).
- **Step 3.** Download and install Heavy Station Kit Asset.

Current version of this documentation can be downloaded from https://dotteam.xyz/pdf/Heavy\_Station\_Kit\_2022.pdf

