



# Support Creation

## Support Structures – Standard Naming Convention

VER4 - 14,0100,1592,814(3DXpertv14SP1)

This document describes the **Support Structures – Standard Naming Convention**.

In general, supports are required in order to hold the part onto printing tray. In some cases, these structures are required to support overhanging areas of the part above the tray. Some of the supports simply keep the material from falling down and some of the supports make sure that the part will not bend upwards or lift.

Each printing technology, material and shape of the part dictate a different angle in which supports may be required, the amount of supports, their robustness and other parameters, driven by the printing technology.

The support types are divided to families, according to their structure and each structure has its own geometries details.

The standardization of the templates' names comes from need to shorten a very long name of each support with its details and to create an efficient tool to understand a large amount of support creation options.

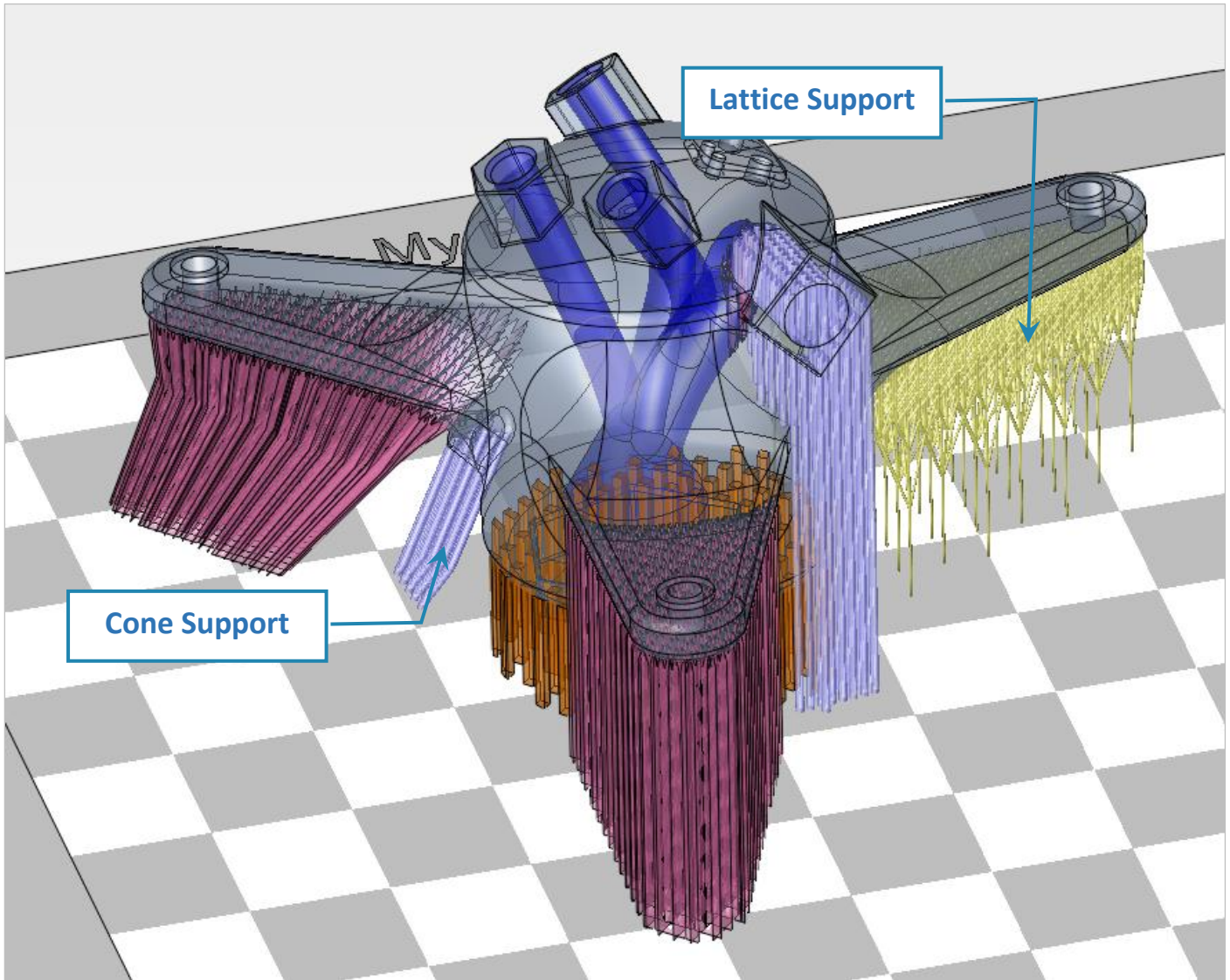
Numerous support templates are supplied with the installation. These templates represent the most commonly used, generic, support types. To enable you to easily find a suitable template, these templates utilize a dedicated naming convention.

Support Templates are stored in the folder:

**...\ProgramData\3D**






**Systems\3DXpert\14.0\Data\3D\_Printing\Templates\General\Support\_Templates\Templates**

The main support types are the following:



Each type includes various options. The following tables describe how the various options appear in the name of each support template.

## Support Type Name











Support Prefix	Support Name	Support Type	Support Type Icon
WALL	WALL	WALL	 Wall Support
CONE	CONE	CONE	 Cone Support
LOWP	LOWEST POINT	WALL	 Wall Support
LOWC	LOWEST CURVE	WALL	 Wall Support
LOWA	LOWEST AREA	WALL	 Wall Support
LATT	LATTICE	LATTICE	 Lattice Support
SWAL	SOLID WALL	SOLID WALL	 Solid Wall
SOLD	SOLID	SOLID	 Solid Support
MEXP	MULTI EXPOSURE	MULTI EXPOSURE	 Multi Exposure

## Pattern Type name

OFF	Offset
HBR	Hatch - Brick
HCL	Hatch - Cross Lines
HHC	Hatch - Hexagons Cell
HHL	Hatch - Horizontal Lines
HPS	Hatch - Plus Sign
HSC	Hatch - Square Cell
HSG	Hatch - Square Grid
HST	Hatch - Stairs
HTG	Hatch - Triangular Grid
OBR	Offset + Hatch - Brick
OCL	Offset + Hatch - Cross Lines

OHC	Offset + Hatch - Hexagons Cell
OHL	Offset + Hatch - Horizontal Lines
OPS	Offset + Hatch - Plus Sign
OSC	Offset + Hatch - Square Cell
OSG	Offset + Hatch - Square Grid
OST	Offset + Hatch - Stairs
OTG	Offset + Hatch - Triangular Grid
CFG	Cell base Fragmentation – Grid
CFH	Cell base Fragmentation – Hatch
MCV	Middle Curve
CRS	Cross (Point & Lowest Point)
FDM	Continuous Lines (FDM)

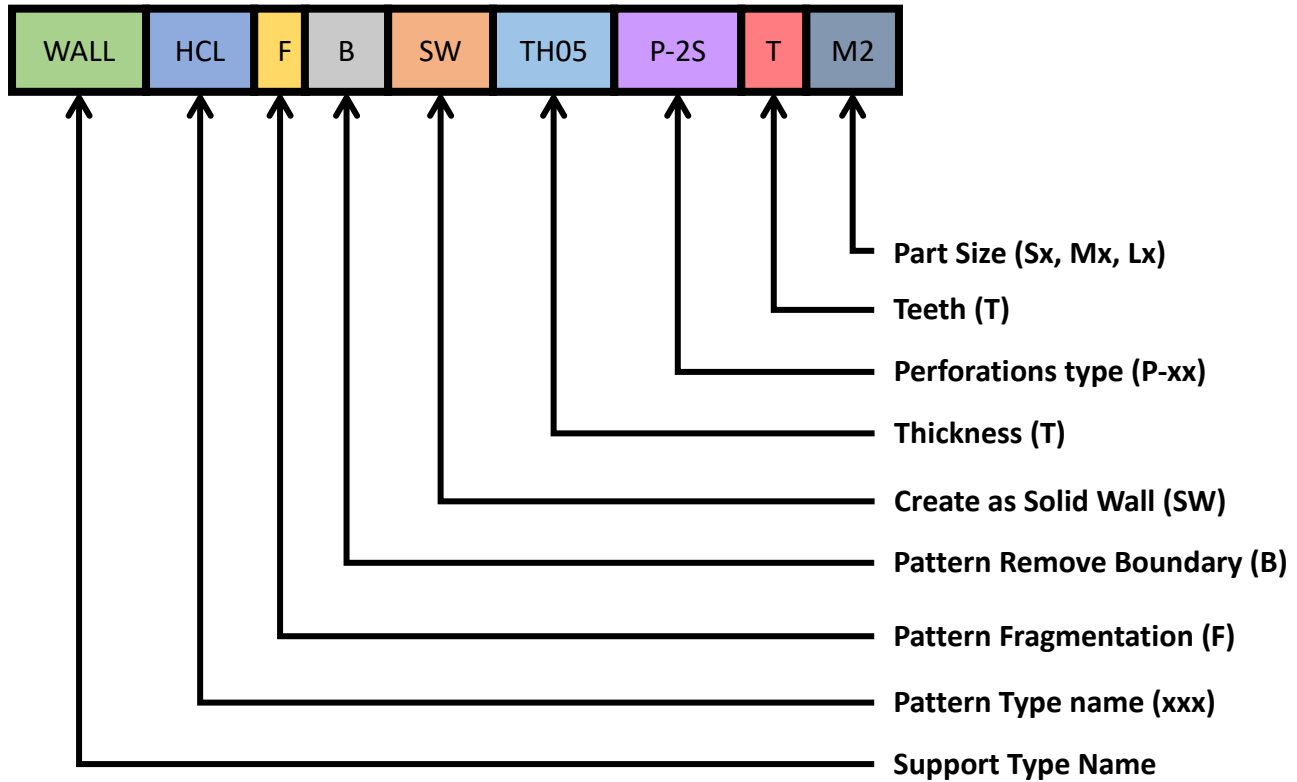
### Perforations type (Texture)

P-1S	
P-1L	
P-2S	
P-2L	
P-3S	
P-3L	
P-4S	
P-4L	
P-5S	
P-5L	

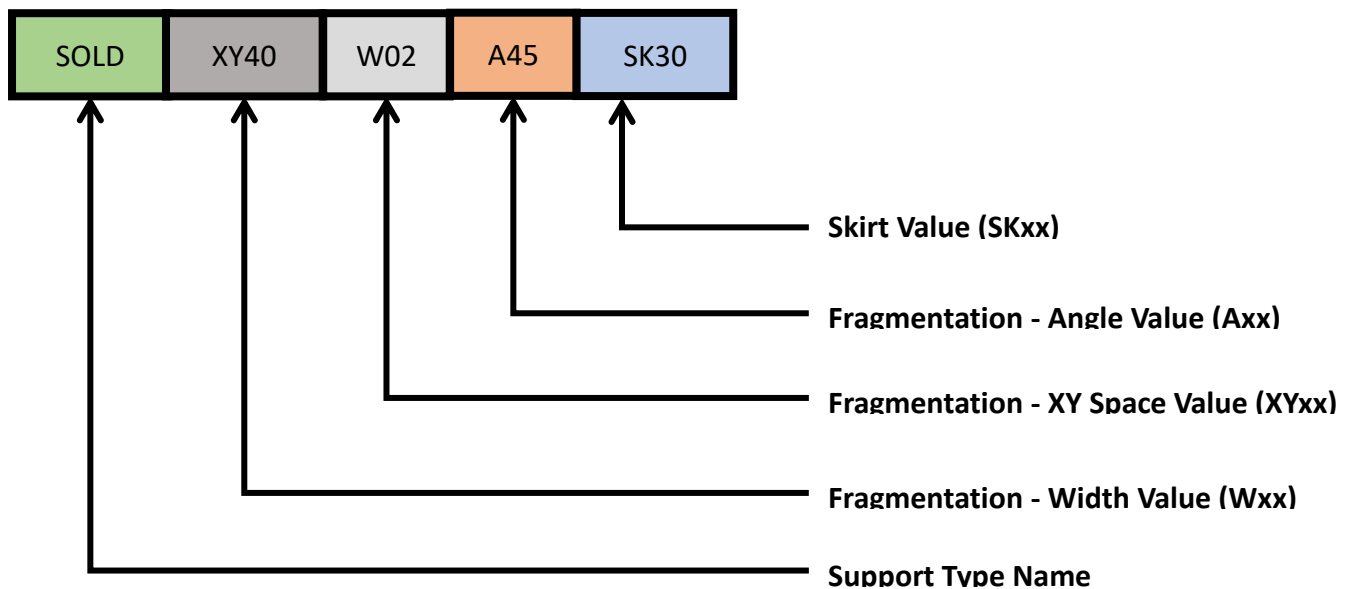
## Part Size

S2	Small
S1	Small-Medium
M2	Medium
M1	Medium Large
L2	Large
L1	Extra large

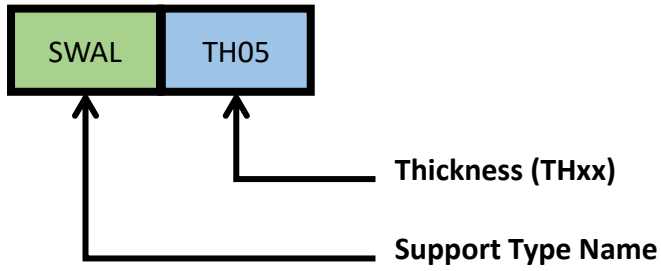
## WALL Support



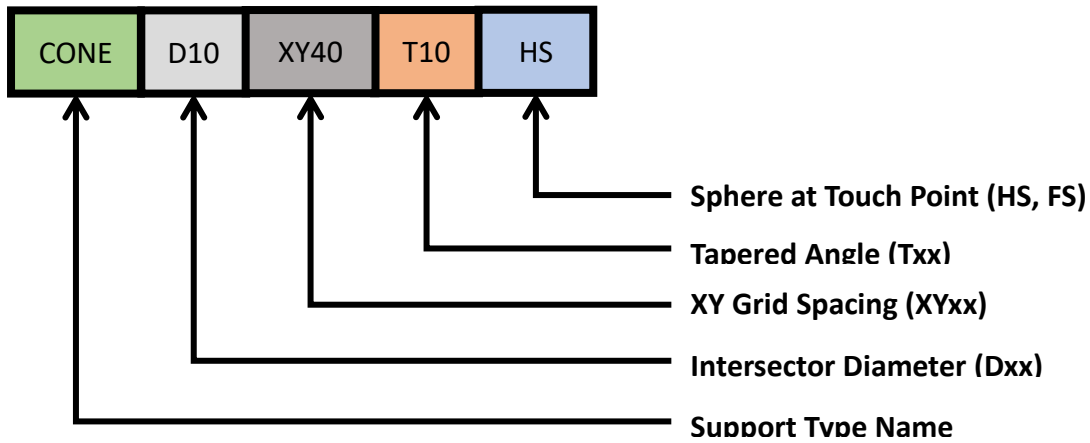
## SOLID Support



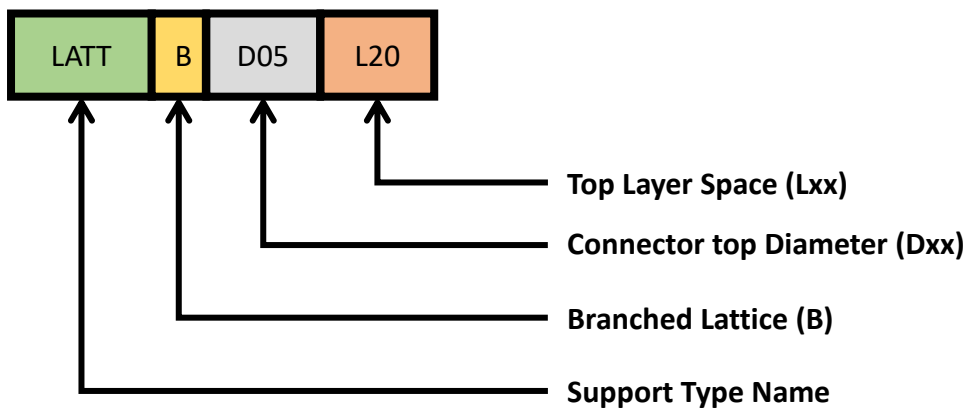
## Solid WALL Support



## CONE Support



## LATTICE Support





## LOWEST POINT Support

