

ACO Monoblock Channel

Subassembly Installation and Reference Guide

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User Guide for Autodesk AutoCAD Civil 3D files

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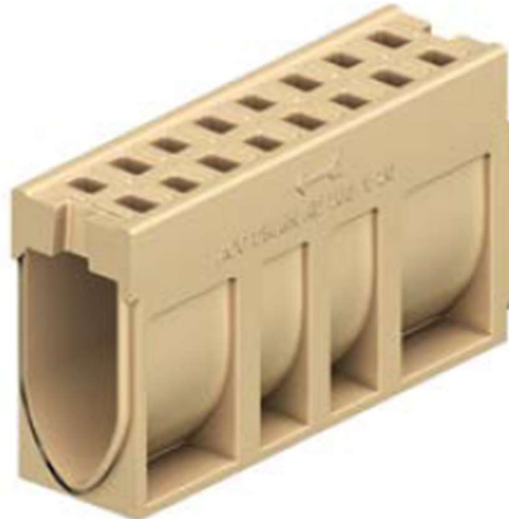
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1. Introduction

This document describes the installation, configuration and use of the ACO Monoblock Channel subassembly component for AutoCAD Civil 3D 2019.



PD200V Channel



RD200V Channel

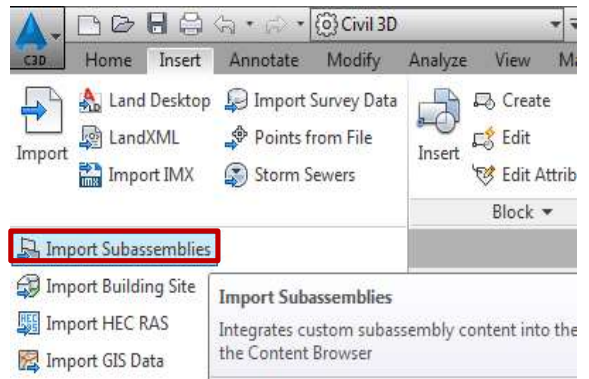
2. Installing the ACO Monoblock Channel subassembly

The Monoblock Channel sub-assembly is available as a .pkt file which contains the subassembly .dll file and associated configuration files for installing the subassembly in Civil 3D.

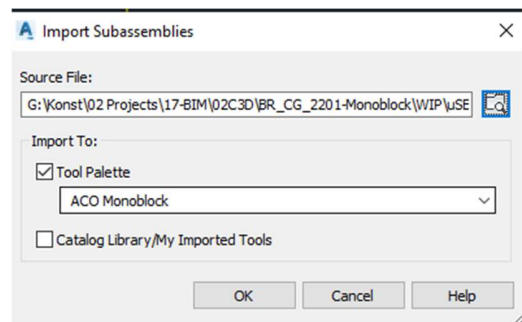
To install the subassembly, click on the Import panel title on the Insert ribbon.



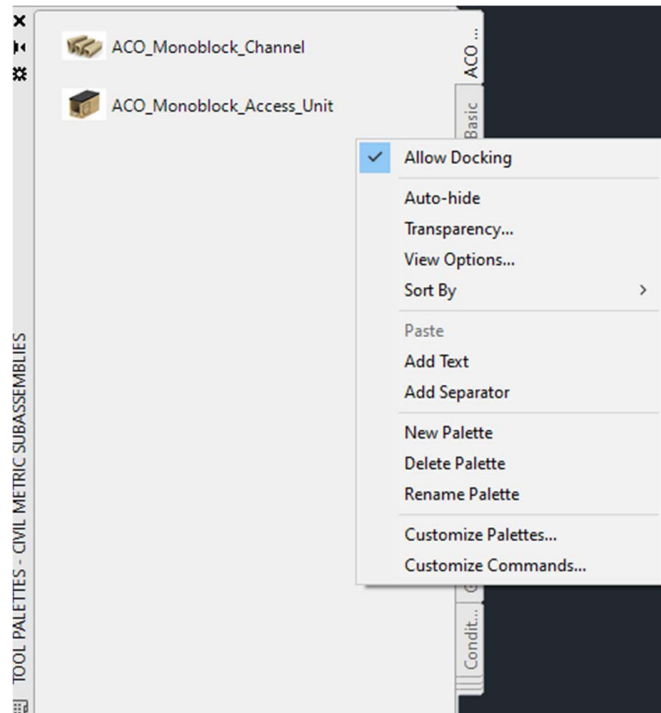
Choose import subassemblies



Browse to the location of the ACOMonoblockChannel.pkt file, and choose a tool palette to import to, or create a new palette. The subassembly can also optionally be added to the user Catalog Library.



The tool palette in civil 3D will now show the ACO Monoblock Channel sub-assembly Note that by right-clicking in the tool palette, the palette can be customized by creating a separate item for the ACO Monoblock Channel, as shown below.



3. Using the ACO Monoblock Channel subassembly

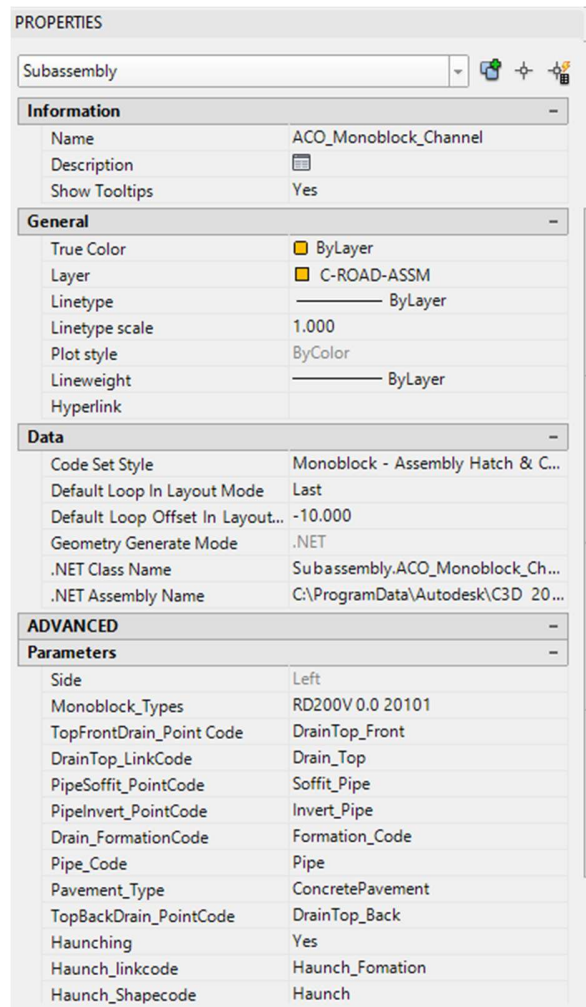
The ACO Monoblock Channel subassembly includes definitions for the following Monoblock Channel components:

Monoblock Channel types:-

PD200V 0.0

RD200V 0.0

RD200V 20.0



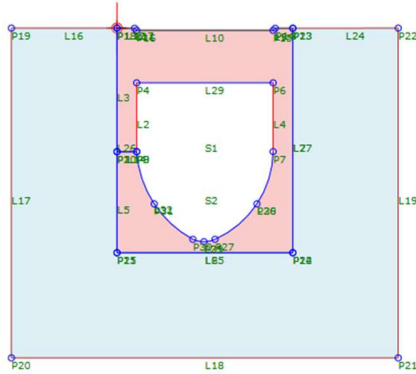
3.1 User Defined Parameters

| Parameter | Default Value | Definition |
|---------------------------------|------------------|--|
| Side | Right | Side to apply the Sub - assembly |
| Monoblock_Types | PD200V00 | Select the type of Channel |
| PipeSoffitPointCode | Soffit_Pipe | Pointcode for the soffit point of the Pipe |
| TopFrontDrain_Point Code | DrainTop_Front | Pointcode for the front top left edge of Monoblock |
| PavementType | ConcretePavement | Type of pavement used for Monoblock |
| Haunching | Yes | Include haunch for the subassembly |
| HaunchShapeCode | Haunch | Shape code for the haunching |
| HaunchLinkCode | Haunch_Fomation | Link code for the haunching |
| MonoblockShapeCode | Monoblock | Shape code for the Monoblock |
| TopBackDrainPointCode | DrainTop_Back | Pointcode for the back top left edge of Monoblock |
| PipeCode | Pipe | Link code for Pipe |
| DrainFormationCode | Formation_Code | Link code for the Drain Formation |
| PipeInvertPointCode | Invert_Pipe | Pointcode for the invert point of the Pipe |
| DrainTop_LinkCode | Drain_Top | Link codes for the Top surface of the Monoblock |

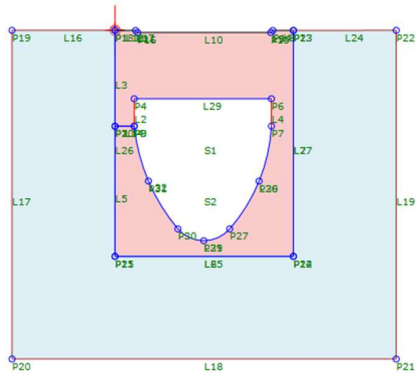
| Parameters | | |
|--------------------------|------------------|--------------------------|
| Side | Left | Display Extended Data |
| Monoblock_Types | RD200V 0.0 20101 | |
| TopFrontDrain_Point Code | DrainTop_Front | |
| DrainTop_LinkCode | Drain_Top | |
| PipeSoffit_PointCode | Soffit_Pipe | |
| PipeInvert_PointCode | Invert_Pipe | |
| Drain_FormationCode | Formation_Code | |
| Pipe_Code | Pipe | |
| Pavement_Type | ConcretePavement | |
| TopBackDrain_PointCode | DrainTop_Back | |
| Haunching | Yes | |
| Haunch_linkcode | Haunch_Fomation | |
| Haunch_Shapecode | Haunch | |
| Monoblock_Shapecode | Monoblock | |

3.2 ACO Monoblock Channel types

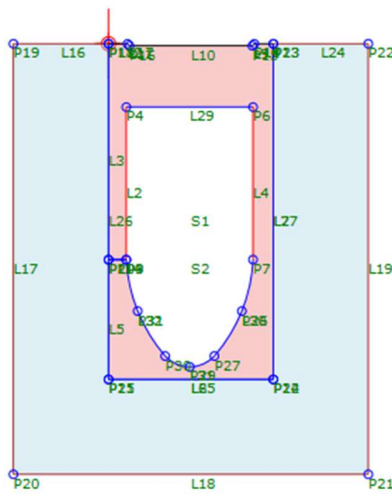
PD200V 0.0 2001



RD200V 0.0 20101



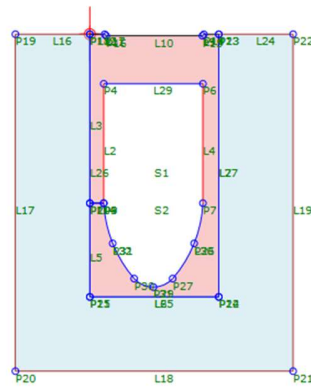
RD200V 20.0 20201



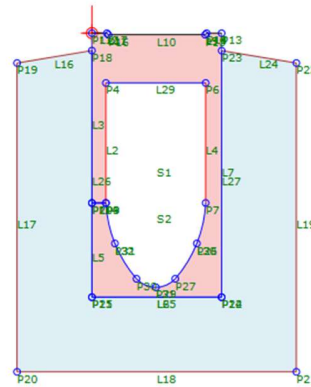
3.3 Haunch types

There are three types of haunching available for Monoblock channel (applicable for all the types).

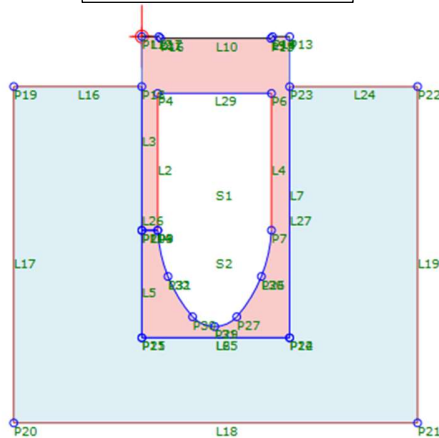
Concrete Pavement



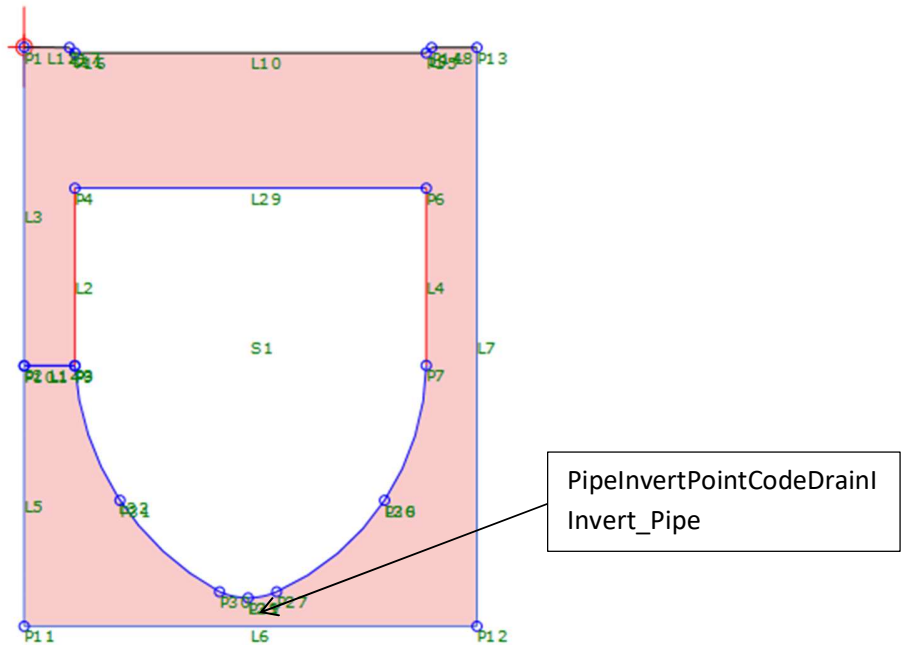
Asphalt Pavement



Block Pavement

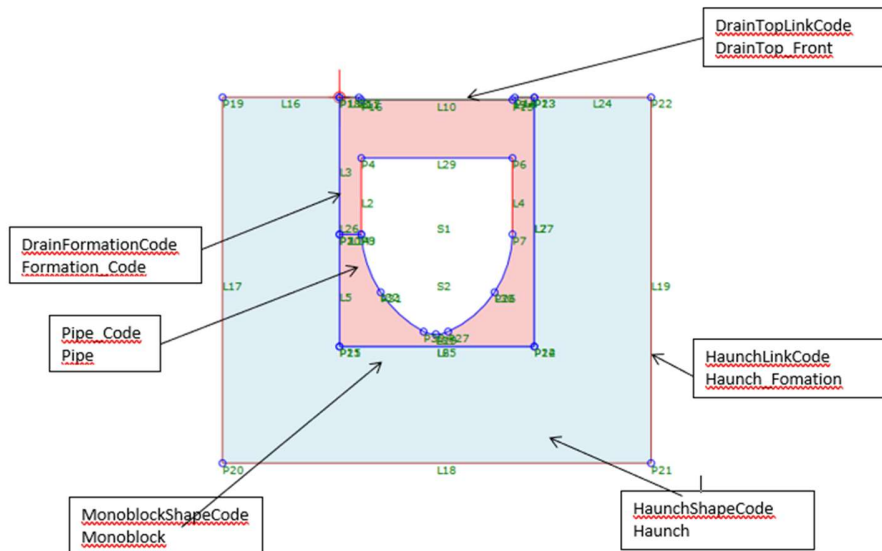


3.4 Point Codes



The point codes can be used in the code set styles to generate featurelines at the specific positions on the subassembly. The pipe point codes are included so that the user may project these lines onto a profile view, or possibly convert the featureline to a pipe object for exporting into an analysis package

3.5 Link and Shape codes

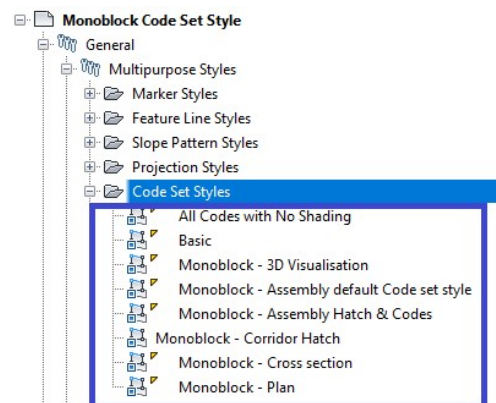


The link codes can be used to display the outline of the subassembly in cross-sections, and also to create surface from the codes. The default values supplied with the subassembly include the standard codes of Top and Formation which are used universally to indicate a Top surface of the corridor model or a Formation surface of the corridor model respectively. The Monoblock Channel is indicated by the default link code of the Monoblock Channel, and the default shape code of it. The haunching is indicated by the default link code of Haunch, and the default shape code of Haunch. All of these codes can be over-riden by the user. The shape codes are used to enable hatching to be applied in the cross-section views, and also to enable volumes of materials to be generated.

4. Code Set Styles

Code Set Styles are used to control the appearance and labeling of the individual point, link, and shape components of the subassemblies. The many styles required are grouped into Code Sets. Code Set settings are located in the General collection on the Settings tab of the Toolspace.

Different code set styles used in the Monoblock Channel Code set style template as shown here.



4.1 Import Code Set Styles from one drawing to another

Open the drawing in which Monoblock Channel Code Set style has to be imported.

- Run command IMPORTSTYLESANDSETTINGS
- Browse to the location of Monoblock Channel Code Set Style template
- Select Styles as desired, check "Import Settings" toggle and click OK
- Warning will be displaying informing that duplicates styles may be overwritten
- Drawing will import styles and settings from Monoblock Channel Code Set Style template to this template