# Creating a Parametric Object in AECOsim

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#### Process

- Create Geometry
  - Create Variables
  - 2d Profile
  - Add Constraints
  - Apply Variables... Test
- Create a Parametric Cell
- Create Property Definitions
- Create Datagroup Definition.
  - Connect definitions to variables



### Variables

#### • Begin with the end in Mind

- Think about how you want to control the object moving forward
- Create Variables with clear simple meaningful names



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## **Create 2D Profiles**

- A well constrained profile.
- DOF =0
- Test behaviour.





### Create a parametric Cell

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New...



## **Create Property Defintions**

- Recreate Variables as DG
   Property Definitions
- Write them into your workset
- Use Working Units as data type





🦻 Definition Editor for	AECOM Training				-	□ ×
៉ New Definition File	🖄 New Property Group	🖄 New Property	Validate	Save		
Definitions	^	Property		Value		
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## **Create Datagroup Definition**

- New Catalog Type
  - Structural Discipline
  - WorkSet
  - Select new property definitions
  - Place user defined object



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## New Item Type

#### Add to WorkSet

📝 New Catalog Item		×		
Name:				
CC_1_Side				
Destination:	File Name:			
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Units:				
mm / mm	$\sim$	📝 New File		
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		Workber		
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		ColumnCo	orbel	
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#### Associates Properties with Variables

Catalog Items	Definition	Property	Value	Editable	Hidden	Parametric Name
- Architectural	Caluma Cashal	Webb	2000			Monthe Marrie
Structural	Column_Corbei	Widen	2000	▼		Width
🗄 🕼 Base Plate	Column_Corbei	Height	5000	V		Height
🗄 🗑 Brace   Steel Horizontal	Column_Corbel	Depth	500			Depth
🗄 🔞 Brace   Steel Vertical	Column_Corbel	C1_lop	6000	✓		C1_lop
🖻 👘 ColumnCorbel	Column_Corbel	C1_Height	1000	✓		C1_Height
CC_1_Side	Column_Corbel	C1_Length	1000	✓		C1_Length
Fireproofing Type	Column_Corbel	C1_HeightEnd	600	<ul> <li>✓</li> </ul>		C1_Height End
Foundation   Concrete Pier	Column_Corbel	C2_Top	6000	✓		C2_Top
🚋 🙀 Foundation   Mat Foundation	Column_Corbel	C2_Height	1000	<ul> <li>✓</li> </ul>		C2_Height
🖶 🏟 Foundation   Spread Footing	Column_Corbel	C2_Length	1000	<ul> <li>Image: A set of the set of the</li></ul>		C2_Length
🗄 🕼 Foundation   Strip Footing	Column_Corbel	C2_HeightEnd	600	✓		C2_Height End
🖅 🙀 Plates   Timber Plate	ObjectClassificatio	MasterFormat				
🖅 🙀 Project_Slab	ObjectClassificatio	OmniClass		<ul> <li>Image: A set of the set of the</li></ul>		
🗄 🐨 🗑 Purlins   Steel	ObjectClassificatio	UniFormat		<ul> <li>Image: A set of the set of the</li></ul>		
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🗄 🗂 Piles	ObjectIdentity	ID   Name (Alternate)		~		
HVAC	ObjectIdentity	ID   Description		~		
Plumbing	ObjectIdentity	ID   Keynote		~		
e- ☐ LPG - ☐ Fire Protection - ☐ Electrical	ObjectIdentity	ID   Asset Tag				
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### Place Object



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	C1_Top	6000.00	-		
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