Level & Size Blocks

AUTODESK.

TOOLBAR	135 100
COMMAND LINE	ELEVS, ATTDEF, DDEDIT
SHIFT/RIGHT CLICK	CADmep+ > Levels

Blocks with attribute definitions can be used to create custom Level \ Size Labels:
-attributes for Levels for reference to the Top, Centre or Bottom of Objects
-attributes for Size for Object Width, Depth & Diameter

Attribute definitions

Cad-Duct/CAD-Mech supports the following attribute definitions

Level attributes

Atribute Definition:	Levels from:	Object Reference:
TOP	Absolute Zero	Top
MID	Absolute Zero	Centre
BTM	Absolute Zero	Bottom
STOP	Soffit	Top
SMID	Soffit	Centre
SBTM	Soffit	Bottom
FTOP	Elevation Datum (Finished Floor Level)	Top
FMID	Elevation Datum (Finished Floor Level)	Centre
FBTM	Elevation Datum (Finished Floor Level)	Bottom

Size attributes

Atribute Definition:
WIDTH
DEPTH
DIA

**Example - *Duct work - *Reporting Levels from Soffit & Absolute to Bottom of Duct*
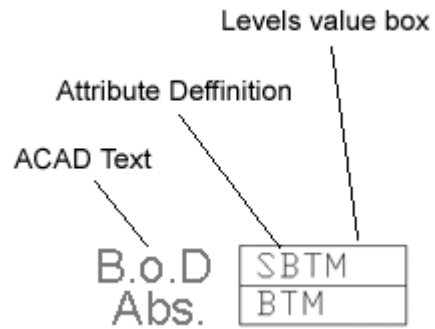
Creating Attribute Definitions

1. Type ATTDEF at the command line
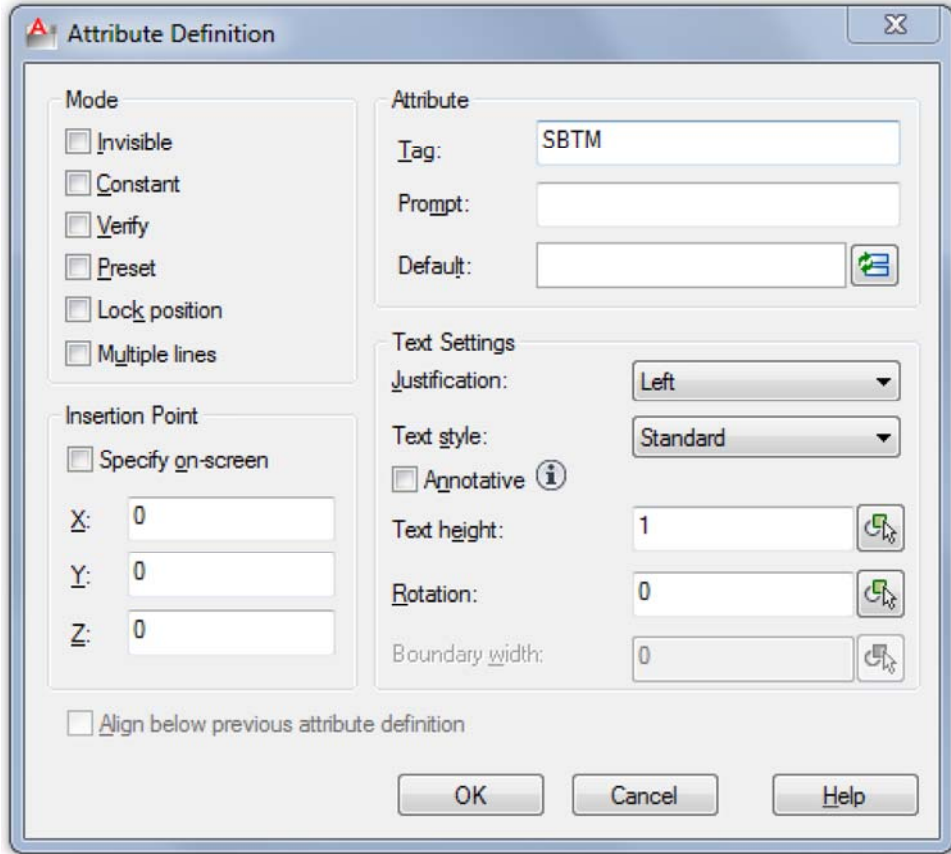
2. Type **SBTM** as the first Attribute Tag
3. The recommendation is that the Text Style height is set to a value of 1 as this is eventually scaled by the Level - Text Style height value

Note: If the Text Style Height field is greyed out, this indicates that the Text Style being used already has a height pre-assigned (Tools > Format > Text Style).

4. Click Ok to add the Attribute Definition to the drawing (unless specified will located @ 0,0,0)
5. Locate the Attribute Definition **-** Copy the **SBTM** definition to create the second Attribute Definition below the first, then use the DDEDIT command to rename the Attribute to BTM**,** as shown below:

Levels value box

Attribute Deffinition

ACAD Text

B.o.D Abs.   SBTM / BTM

6. Use the **BLOCK** command to create a **Block Definition**, select the **ACAD Text**, **Attribute Definitions** & **Level** value box.

Note: **Level** Blocks should be created on ACAD - Layer 0, by doing this they inherit the currently selected layer properties (this also allows the text layer to be frozen independently from the 3D duct layer - may require a REGEN)
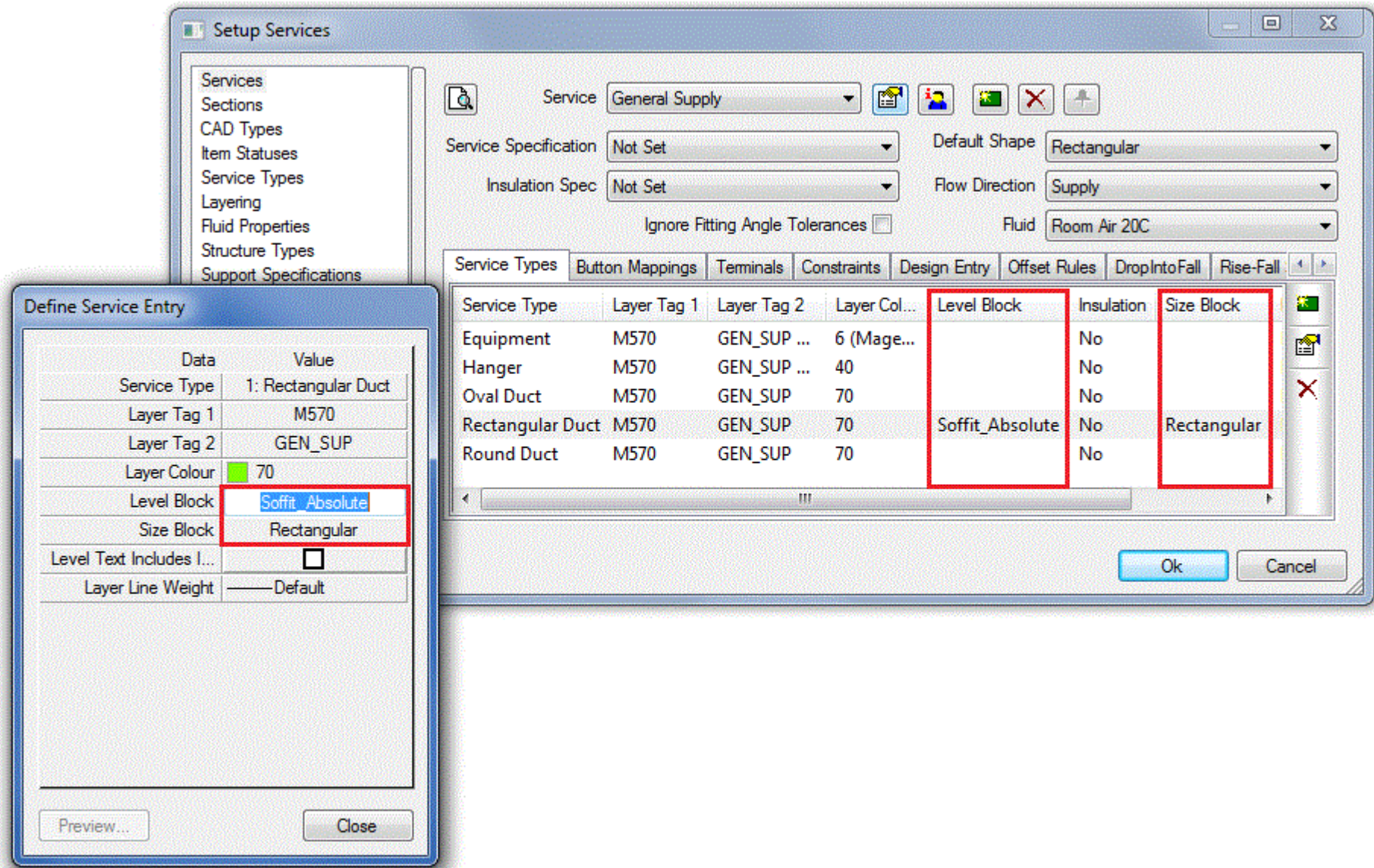
7. Enter a **Block Definition Name** e.g. "Soffit_Absolute"
8. Click Ok to the Block definition dialogue

Assigning the Block Definition to the Service - Service Type

1. Select the correct Service from drop-down menu e.g. **HVAC** - *General Supply*
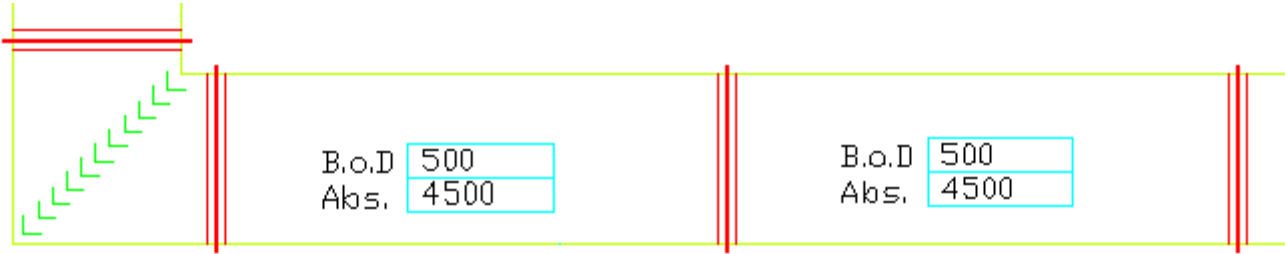**2.** Select the correct *Service Type* and assign the Block Definition created earlier, as show below:

3. **Click** Close
4. **Click** Apply/Ok to the Setup Services dialogue

Adding the Block Levels Label
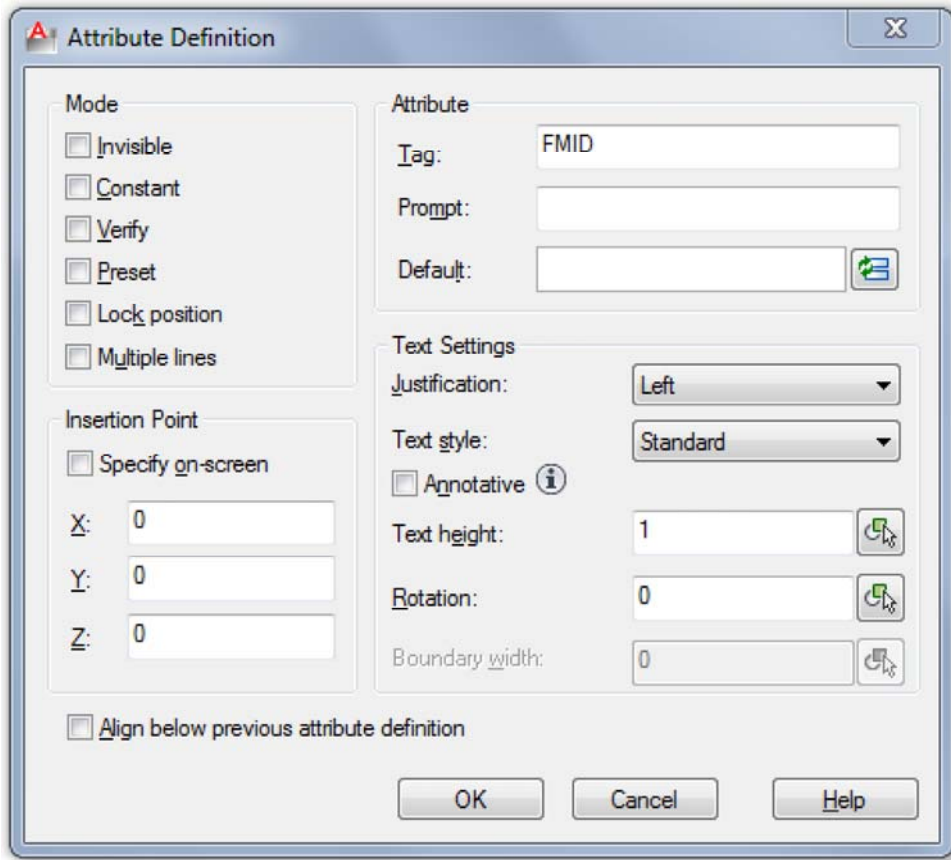

1. Add a Rectangular Duct Item to the drawing

2. Select the Levels button

3. Select the Rectangular Duct Item.

Example - *Pipe work - * *Reporting Levels from Elevation Datum (Finished Floor* Level*) to Centre Line*

Creating Attribute Definitions

1. Type ATTDEF

2. Type **FMID** as the first Attribute Tag
3. Check that the Text Style height is set to a value of 1
4. **Click** Ok to add the Attribute Definition to the drawing (unless specified located @ 0,0,0)
5. Create **ACAD Text** for the Level description, as per Example below "CL" - if desired create a Levels' value box.
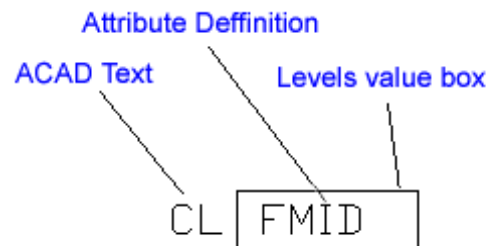

6. Use the **BLOCK** command to create a **Block Definition**, select the **ACAD Text**, **Attribute Definition** & Level **value box**.
7. Enter a **Block Definition Name** e.g. "Elevation_CL"
8. **Click** Ok to the Block definition dialogue

Note: When setting Soffit or Elevation datum's refer to the Sections topic.

Assigning the Block Definition to the Service - Service Type

1. Select the correct Service from drop-down menu e.g. **Water & Liquid Supplies** - *Mains Cold Water*
2. Select the correct *Service Type* and assign the Block Definition created earlier, as show below:
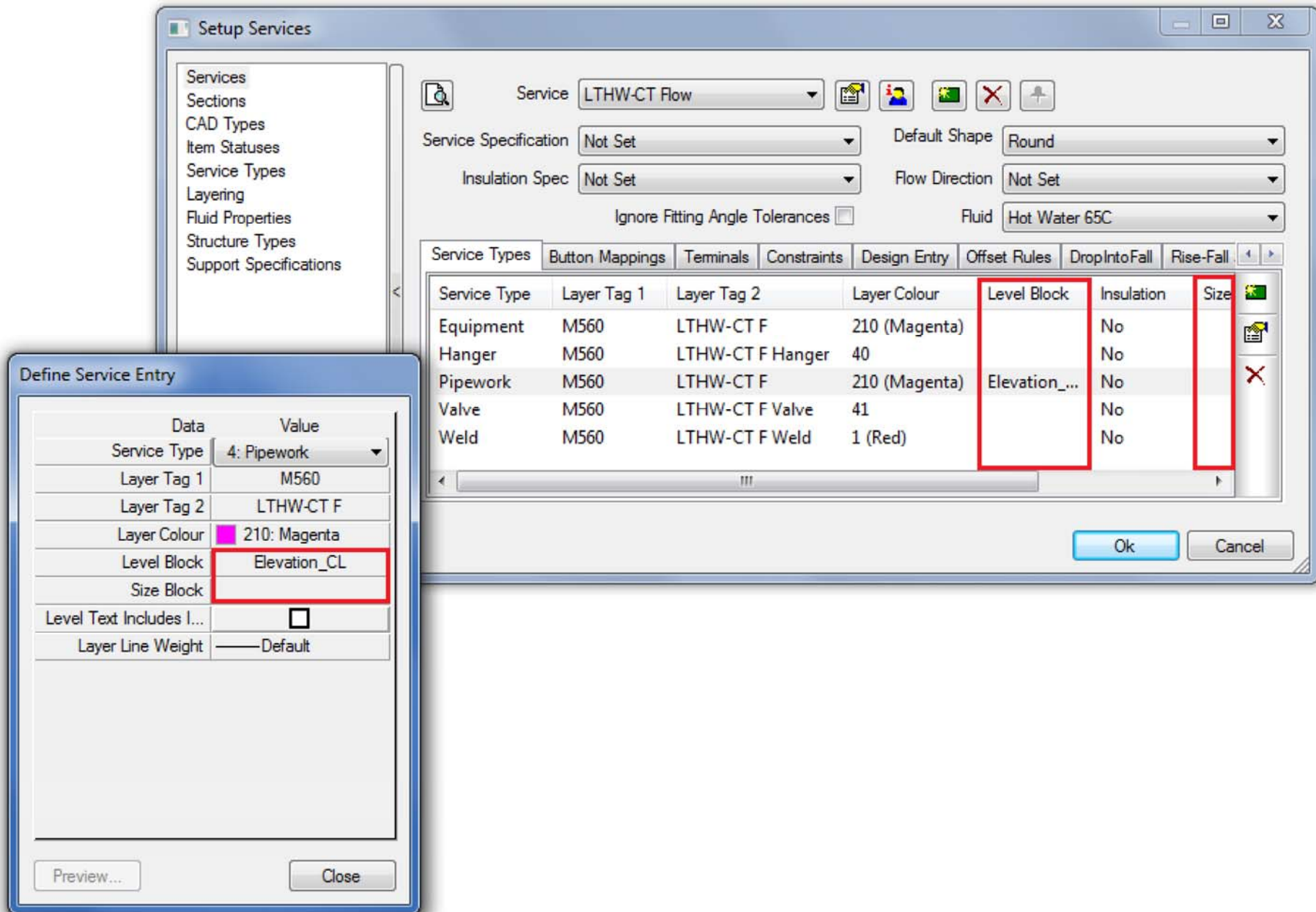
3. **Click** Close
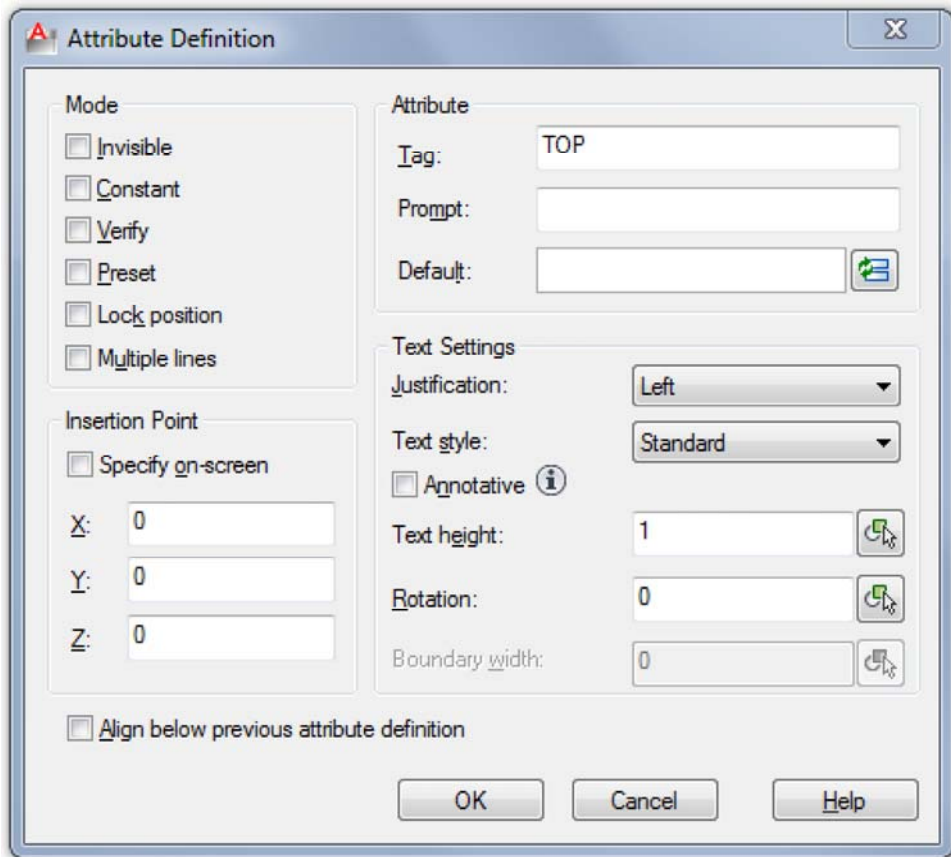4. **Click** Apply/Ok to the Setup Services dialogue

Adding the Block Level Label

1. Add a Pipe work Item to the drawing
2. Select the Levels button
3. Select the Pipe work Item.

Example - *Steel work* - *Levels from Absolute to Top of Steel work*

reating Attribute Definitions

1. Type ATTDEF

2. Type **TOP** as the Attribute Tag
3. Check that the Text Style height is set to a value of 1
4. **Click** Ok to add the Attribute Definition to the drawing (unless specified located @ 0,0,0)
5. Create **ACAD Text** for the Level description, as per Example below "T.o.S" - if desired create a Levels' value box.
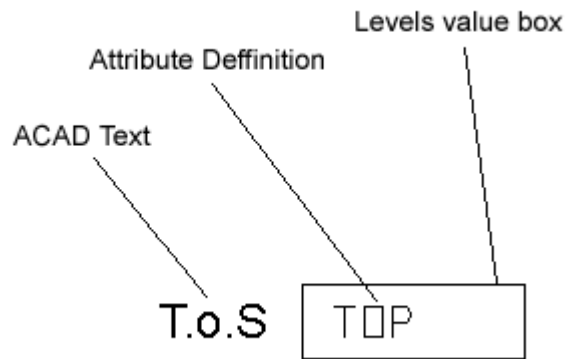
Levels value box

Attribute Deffinition

ACAD Text

T.o.S   TOP

6. Use the **BLOCK** command to create a **Block Definition**, select the **ACAD Text**, **Attribute Definition** & **Level** value box.
7. Enter a **Block Definition Name** e.g. "Top of Steel"
8. **Click** Ok to the Block definition dialogue
9. **Click** Ok to the Edit Attributes dialogue

Note: When setting Soffit or Elevation datum's refer to the Sections topic.

Assigning the Block Definition to the Service - Service Type

1. Select the correct Service from drop-down menu e.g. **Structural** - *Steelwork Structural*
2. Select the correct *Service Type* and assign the Block Definition created earlier, as show below:
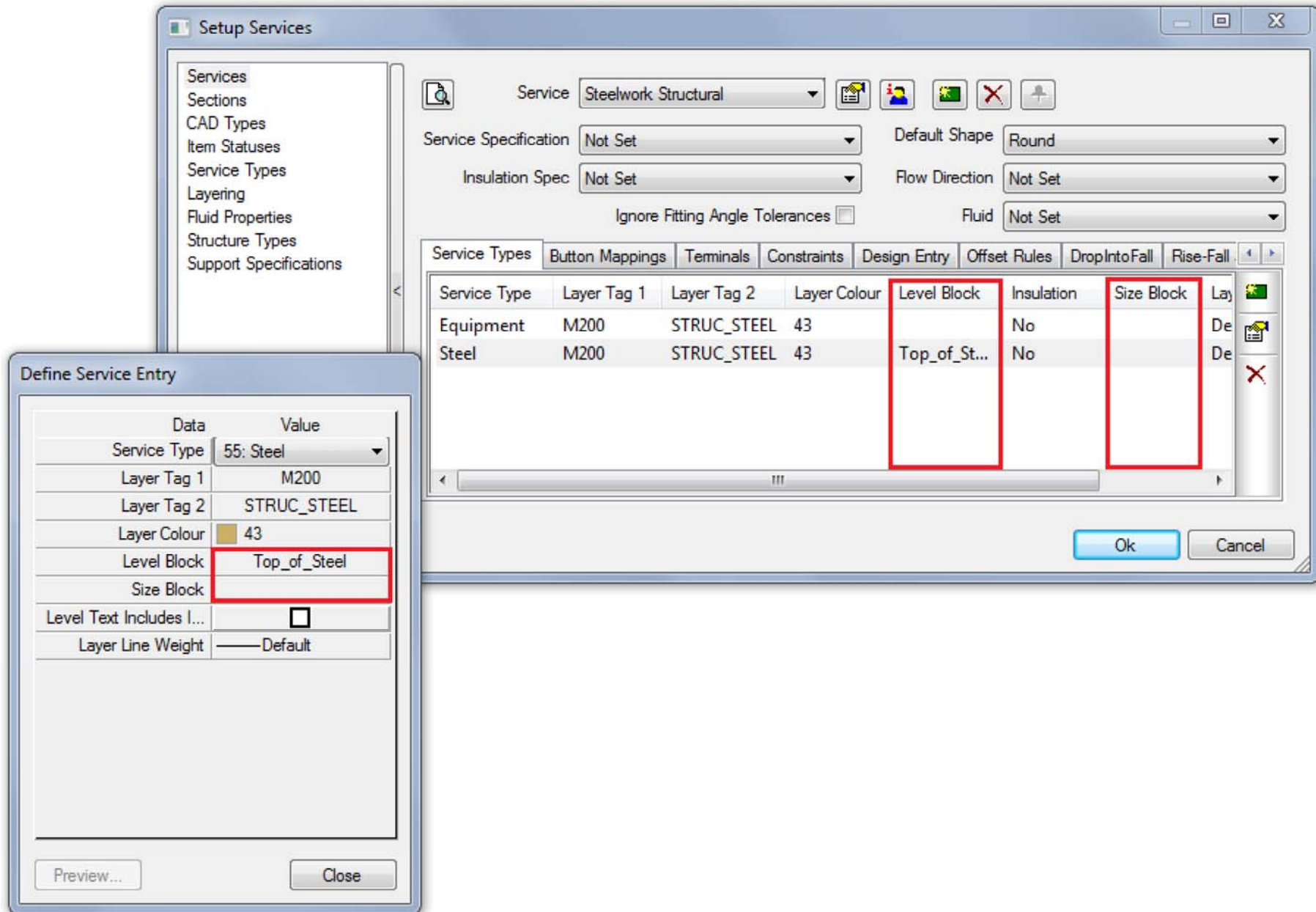
3. **Click** Close
4. **Click** Apply/Ok to the Setup Services dialogue

Adding the Block Level Label

1. Add a Structural Steel Item to the drawing

2. Select the Levels button

3. Select the Structural Steel Item.

T.o.S 3500

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