

# HILTI

## PROFIS Field Points

English

en






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## **1 Description**

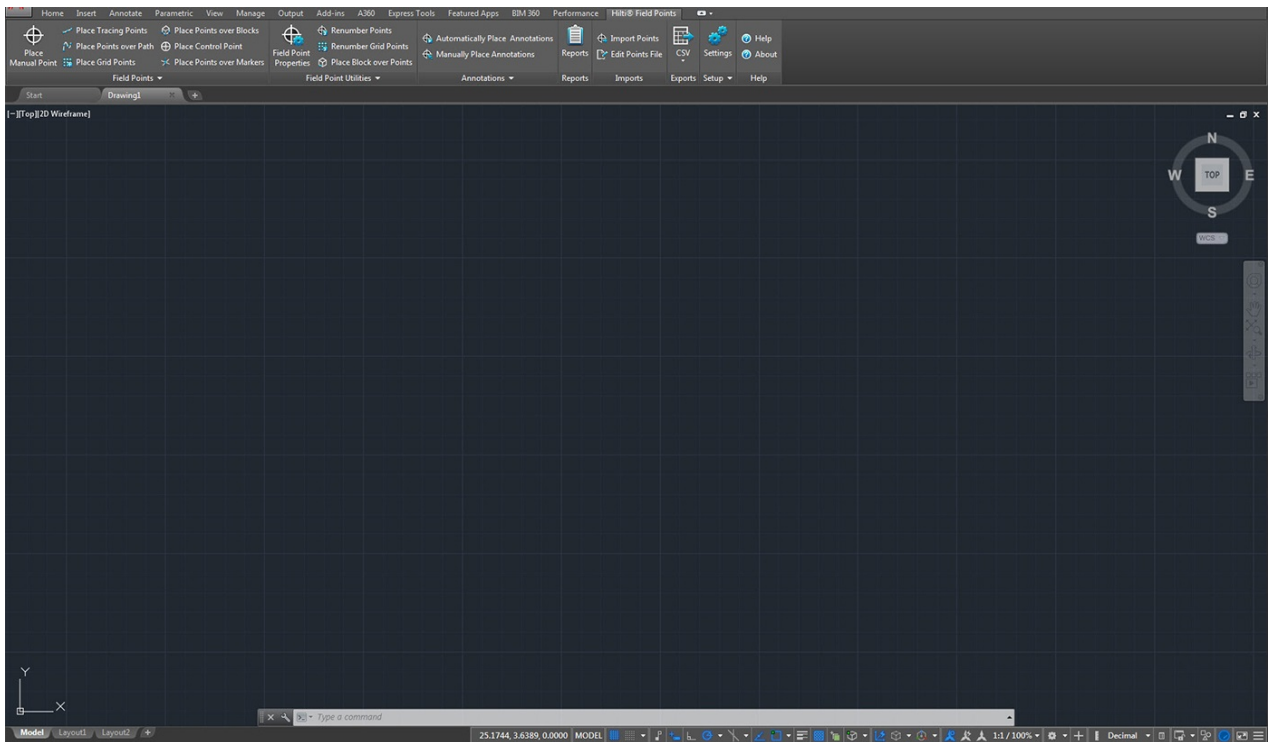
### **1.1 PROFIS Field Points**

The PROFIS Field Points software application provides a CAD solution to designers needing to pinpoint various objects in the field. Field Points can be created in a drawing and then exported for layout use in the field. Field points can be created, recorded, and modified for import originating drawing to document exact project data.

Created by industry specialists, this software is compatible with various compatible Autodesk applications to enable you to design, create and "round trip" field points quickly and efficiently.

Refer to the information on the following pages to learn more about the features PROFIS Field Points.

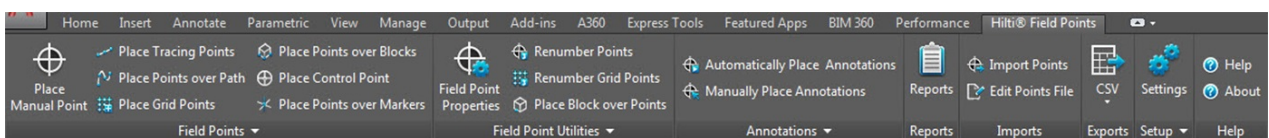
## 1.2 Software Navigation



The PROFIS Field Points uses ribbon technology for easy access to the available functions.

The general layout of the windows corresponds to the AutoCAD® application.

### 1.2.1 PROFIS Field Points Ribbon



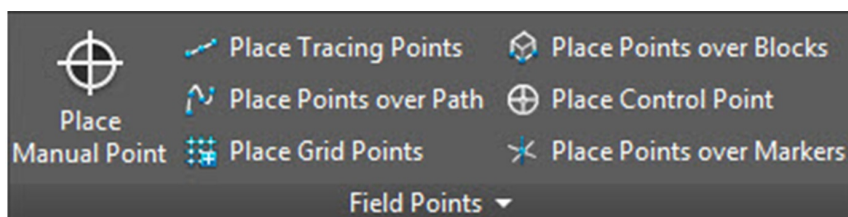
The PROFIS Field Points tab provides easy access to the program commands. The tab includes groups and panes. The tab is part of the software ribbon and runs along the top of the AutoCAD® software screen.



#### Note

All the instructions in this user guide refer to the commands on the PROFIS Field Points tab. When you launch AutoCAD®, your AutoCAD® settings define whether or not the PROFIS Field Points ribbon appears on the screen. If the ribbon is closed, you will need to re-open it to follow the instructions.

### 1.2.2 Ribbon Functions



The ribbons contain commands needed when working with the field points software.

### 1.2.3 Dock/Undock Panes

You can dock and undock panes. The graphic above shows an undocked tab.

1. When the control is open, below the ribbon click on the pane you want to move.
2. Drag the pane to the desired location and release the mouse button.

To dock the pane back on to the ribbon, click the handle and drag the pane to where you want it on the ribbon. Release the mouse button when the pane is in the appropriate location.

## 1.2.4 Buttons/Toolbars

### 1.2.4.1 Application button



The Application button provides access to various tasks, such as printing, saving, exporting your drawing in other formats, and so on. When you click on the Application button, a menu opens. Click on the task of your choice.

Your Autodesk application provides several methods of opening modules with the PROFIS Field Points software.

### 1.2.4.2 Quick Access Toolbar



The Quick Access toolbar is located, by default, at the top of the AutoCAD window. You can add commonly used commands to the Quick Access toolbar.

1. Go to the **Quick Access** toolbar in the top left corner of the main window.
2. Click ▼.

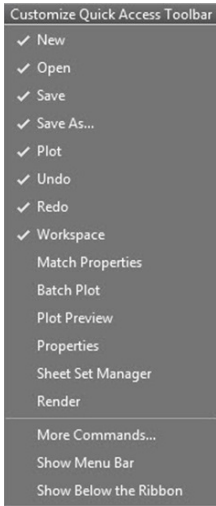
The list of options opens.

- Icons with a checkmark are present on the **Quick Access** toolbar.
- Items without a checkmark can be added to the toolbar by clicking on the option. The item is added to the toolbar. The next time you open the options list, a checkmark displays next to the item.

#### OR

1. If the item is not available in the options, you can right-click anywhere in the toolbar area → click **Customize Quick Access Toolbar**.
2. In the **Customize User Interface** dialog, click on the appropriate toolbar command.
3. Drag it to the **Quick Access Toolbar**.





## 1.2.5 Preliminary Steps

With PROFIS Field Points, the preliminary steps to use the software are easy.

- Create your Revit model.
- Use PROFIS Field Points software to place field points.

### 1.2.5.1 Important Notes

Please note that some Revit drawing variables are important to consider when using the PROFIS Field Points software:

- **Dimension Style (DIMSTYLE)**  
The current dimension style controls the appearance.
- **Units (UNITS)**  
The units for imperial or metric will populate the PROFIS Field Points dialogs.

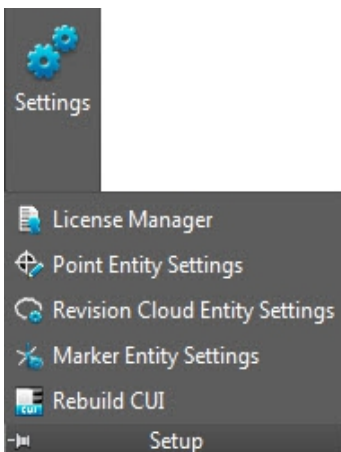


#### Note

**Hilti** recommends that you go to the Setup module before using the PROFIS Field Points software. This module allows you to create field point defaults that will be used throughout the system.

## 2 Operation

### 2.1 Setup



The **Setup** panel allows you to set default parameters for field points and field point entities, as well as rebuild the CUI (Custom User interface).

**Quick Steps: PROFIS Field Points → Setup**

1. On the **PROFIS Field Points** tab, go to **Setup**.
2. Click on the appropriate link below depending on what you want to do.

**Field Point Settings** → page 8

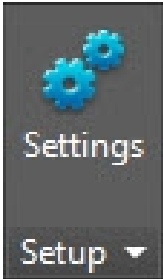
**License Manager**

**Field Point Entity Settings** → page 15

**Revision Cloud Entity Settings** → page 18

**Rebuild CUI** → page 19

## 2.1.1 Field Point Settings



The Field Point Settings module allows you to set defaults that will be used system-wide. You can change these settings for certain point types, but all changes you make outside the **Field Point Settings** window do not apply to your default settings. **Hilti** recommends creating defaults, because this makes setting field points much easier.

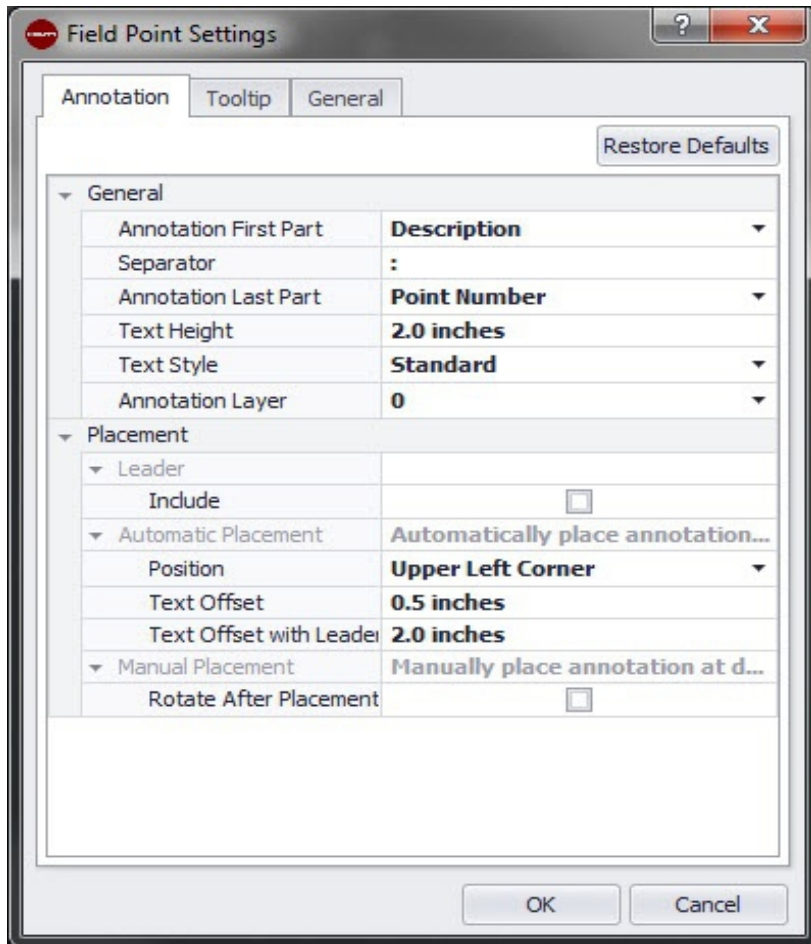


**Note**

If you make changes and then decide that you want to go back to the defaults, click **Restore Defaults**. Keep in mind that all customization will be lost if you restore the default settings.

---

**Quick Steps: Setup → Settings**



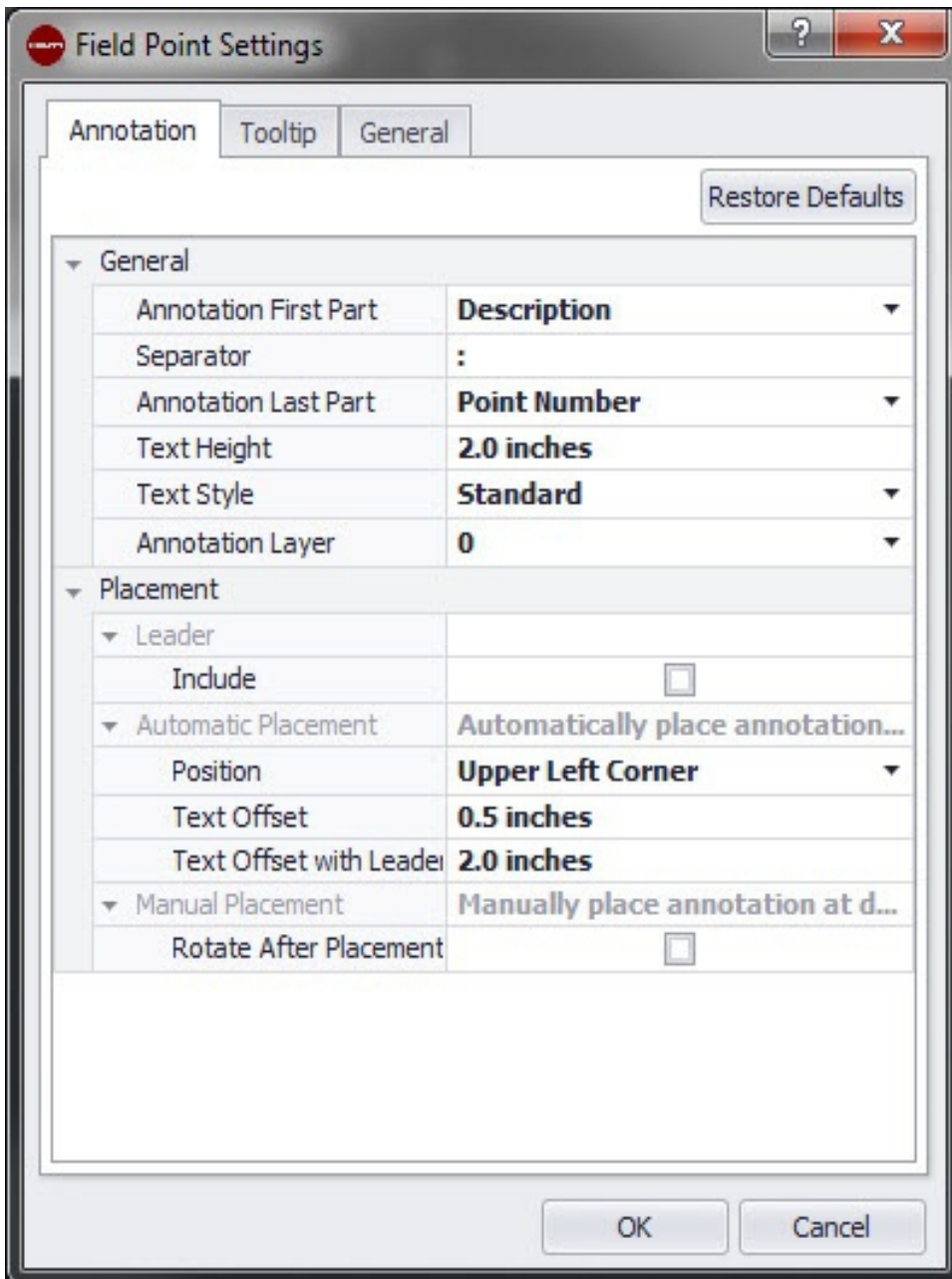
1. On the **Setup** panel, click **Settings**. The Field Points window opens.
2. Click on the tab you want to work with.

**Annotation** → page 10

**Tooltip** → page 12

**General** → page 10

## 2.1.1.1 Annotations



The **Field Point Settings Annotation** tab allows you to define how the software handles the **Annotations** when you set your points.

**Quick Steps:** **Field Point Settings** tab → **Annotations**

Annotation defaults can be set for the content, the look, and placement of the annotations. These defaults remain in effect until the **Restore Defaults** button is used to revert to factory defaults. Annotations placed in the drawing beforehand are not affected by these changes to the settings.

### 2.1.1.1.1 General

In the **General** pane, set the following properties:

**Annotation First Part:**

- Click ▼ and select a setting for the annotation prefix.

**Separator**

This setting defines the separator between annotation prefix and suffix. Examples of visually effective separators are:

- Colon :

- Period .
- Dash -

**Note**

If none of these characters is specified, you can use a separator of your choice.

---

**Annotation Last Part**

- Click ▼ and select a setting for the annotation suffix.

**Tag Orientation**

- Click ▼ and select the tag orientation (horizontal or vertical).

**2.1.1.1.2 Placement**

In the **Placement** pane, set the following properties:

**Leader/Include**

- If applicable, select the checkbox  to include a leader line as part of the annotation.

**Note**

The appearance of the leader is determined by the current dimension style.

---

**Automatic Placement**

If you select the include checkbox , the Arrow Head Offset field displays. Enter a value (in inches/millimeters, depending on your settings) to define the distance between the arrow head and the field point.

**Note**

This setting is applied when you are setting points and the annotation is set to **Automatic**.

---

In the **Automatic Placement** pane, proceed as follows:

- **Position**  
Click ▼ to select the placement of the annotation in relation to the field point.
- **Text Offset**  
Enter this property value (in inches/millimeters, depending on your settings) to define the distance between the text and the field point.

**Manual Placement**

1. Go to the **Manual Placement** pane.
2. Activate the  **Rotate after placement** checkbox.

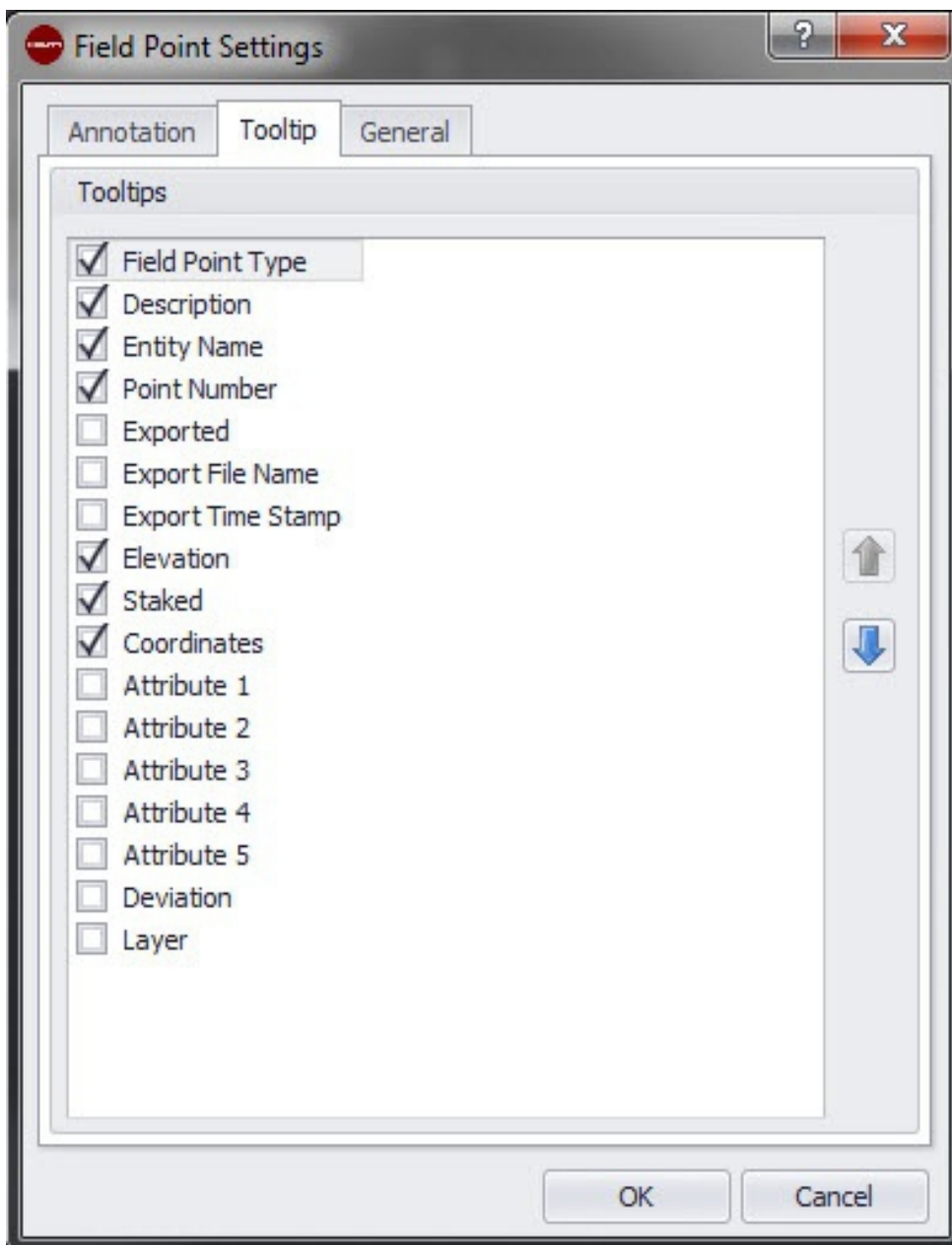
**2.1.1.1.3 Complete Annotation Settings**

- When done, click **OK**.

**OR**



- Click the Tooltip → page 12 or General → page 13 tab.

## 2.1.1.2 Tooltip



The Field Point Settings Annotation tab allows you to define how the software handles annotations on your points.

**Quick Steps:** **Field Point Settings** → page 8 tab → **Tooltip**

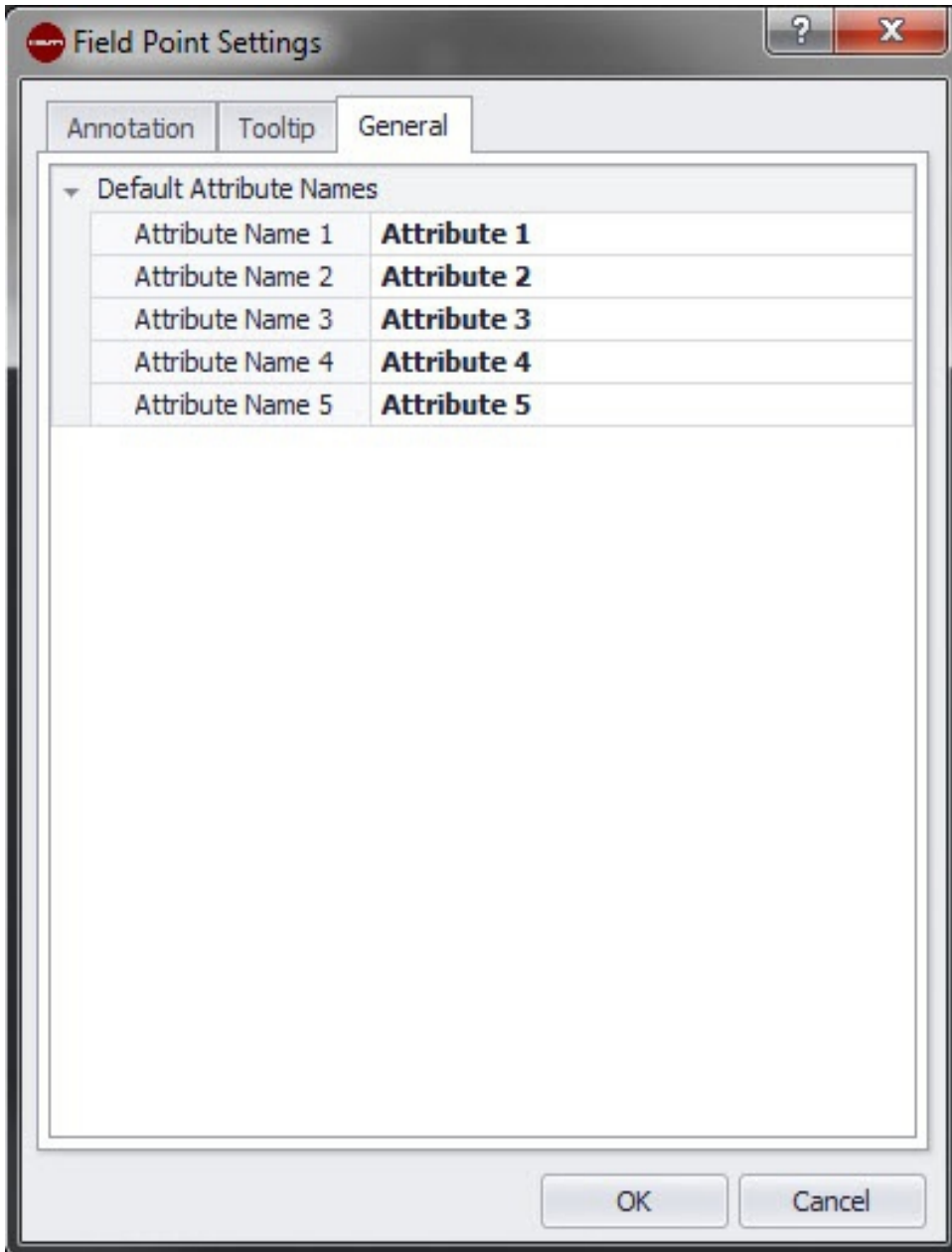
- Select the appropriate checkboxes  for the tooltips that you want to view under **Field Point** tooltip.
- You can change the order of the tooltips in the list for an entity by clicking  or . This allows you to move frequently used tips closer to the top of the list.



### Note

The Field Point tooltip can be viewed by hovering your mouse over the field point.

### 2.1.1.3 General



Attributes provide your field crew with detailed information about a field point, for example whether it is a hanger, bolt, or sleeve. The attribute names appear for each field point insertion and also in the Property Settings window.

**Quick Steps:** **Field Point Settings** → page 8/**Tooltips tab** → page 12

You can assign up to five attributes, each with up to 64 characters.



#### Note

Keep in mind that attributes defined under **Settings** → **General** are defaults. You can assign point-specific attributes when placing or editing points.

## 2.1.2 License Manager

### 2.1.2.1 Request Field Points License

Hilti PROFIS Anchor user sign up

**Sign up**

Company name\*

Hilti customer number

Activation key should be sent to the following address:

E-mail\*

Repeat E-mail\*

First name\*

Last name\*

Address\*

Zip code\*

City\*

Country\*

Telephone no.

After signing up, you will receive the activation key within the next 10 days to the above E-mail address. If not, please call customer service or sign up online at [www.hilti.com](http://www.hilti.com)



#### Note

The fields marked \* (asterisk) are mandatory fields.

1. Click **Setup** in the menu bar.
2. Click **License Manager**.  
The registration window appears.
3. Click **Register**.  
The Request License window opens.
4. Make the appropriate entries in the fields.
5. Click **Submit**.



#### Note

Within a few days, the activation code will be sent to the email address you provide.



## 2.1.2.2 Activate Field Points license

Hilti PROFIS Anchor Registration

**Register your software and stay informed**

Registering your Hilti software and securing an activation key is a straightforward process that brings you a wide range of benefits including updates, technical support and timely notification about new software features.

**Already have your activation key?**

Enter your activation key

xxxxxx-xxxxxx-xxxxxx-xxxxxx-xxxxxx (Case Sensitive)

First name\*

Last Name\*

E-mail\*

Tel no.\* (no dashes, spaces)

**No activation key? Sign up now!**



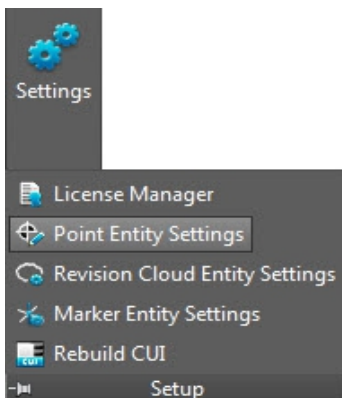
### Note

The fields marked \* (asterisk) are mandatory fields.

To test PROFIS AutoCAD for 30 days, click **Later**. The number in parentheses is a countdown number indicating the days remaining.

1. Click **Setup** in the menu bar.
2. Click **License Manager**.  
The registration window appears.
3. Make the appropriate entries in the fields.
4. Click **Submit**.
5. Click **Register**.

## 2.1.3 Point Entity Settings



Field Point Entity Settings allow you to:

- Name and organize the entities you want available for use as field points in your drawings.
- Organize the entities into categories to aid in locating a desired entity.
- Control the availability of entities from this window.

Field Points drawing entities can be stored in two locations:

A standard location which is predetermined partially based on your PROFIS Field Points installation

## OR

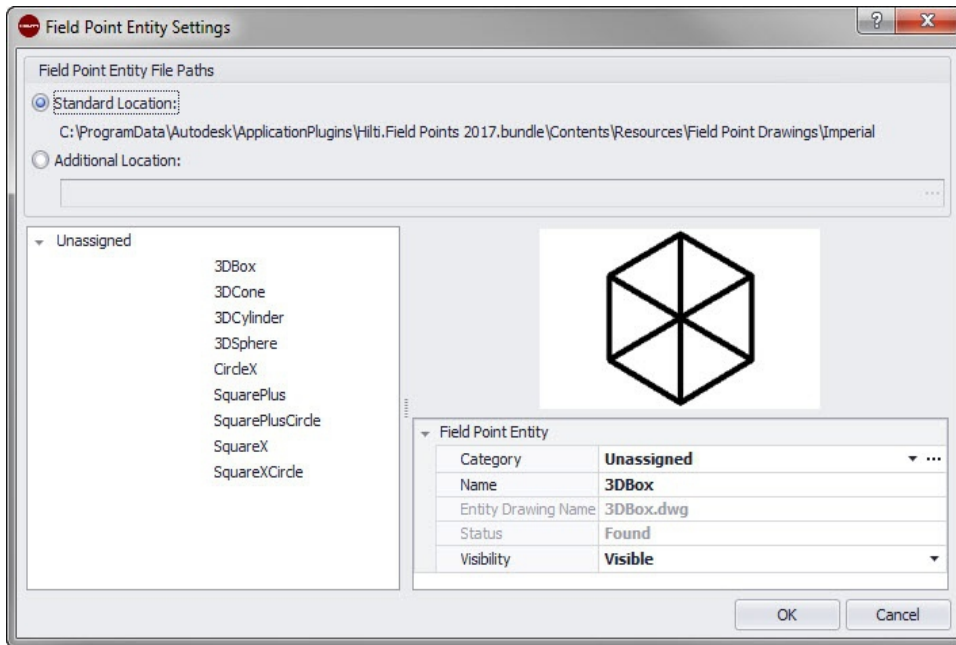
An additional user-defined location.

Drawings stored at these locations show initially in the list of entities under the Unassigned category. As you begin assigning the entities to the categories of your choice, the list is organized around the categories that you create.

**Quick Steps:** Setup → ▼ → Point Entity Settings

**All point insertion dialogs** → Category → 🌀

To modify the properties of a field point entity, proceed as follows:



### Note

If you select **Additional Location**, you must also set the additional field point entity location path. You can click ... to navigate to the desired location. The field point entity list is populated based on the contents in the location selected.

1. Select your desired working location by clicking the **Standard Location** or **Additional Location** option button.
2. In the left pane of the window, click on the field point entity you want to work with.
3. In the Field Point Entity pane, you can modify the following properties:

#### Category

Click ▼ and select the desired category from list. You can also click ... to create a new category. Refer to the Category List → page 17 topic for detailed instructions on managing categories.

#### Name

Enter the name for this entity. The entity names must be unique across all field point entity file paths. This ensures that you are selecting the correct entity from the **Entity Name** list when you place your field points.

#### Entity Drawing Name

This field displays the actual drawing file name (not editable).

#### Status

This field displays information about the current condition of the drawing file, such as **Found** or **Not Found** (not editable).

#### Visibility

Click ▼ and select the availability status of the entity from the list.

Hidden will hide the entity in the **Entity Name** selection list.

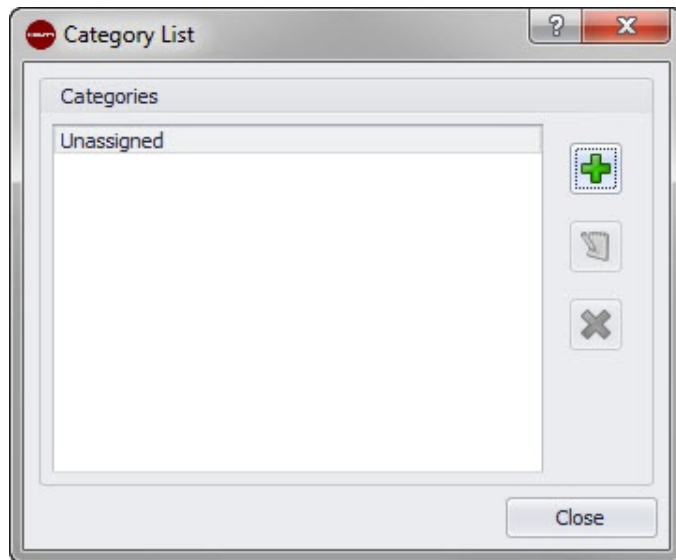
Visible allows the entity to appear in the **Entity Name** selection list.

4. You can modify the properties of all the entities at this location. When you have finished click **OK** to save your changes.

### 2.1.3.1 Category List

The Category List window allows you to create additional categories for selection in the **Field Point Entity Settings** window. Categories help you keep your field point entities better organized.

**Quick Steps:** **Field Point Entity Settings** → **Category** → ...



#### 2.1.3.1.1 Add Categories


1. Click .
2. In the **Add New Category** dialog, enter the **Category Name**.
3. Click **OK**.




#### Note

You cannot modify the **Unassigned** category. This is a system default.

---


1. Click the category you want to modify.
2. Click .
3. Enter the new **Category Name**.
4. Click **OK**.

#### 2.1.3.1.2 Delete Categories

1. Click the category you want to delete.
2. Click .

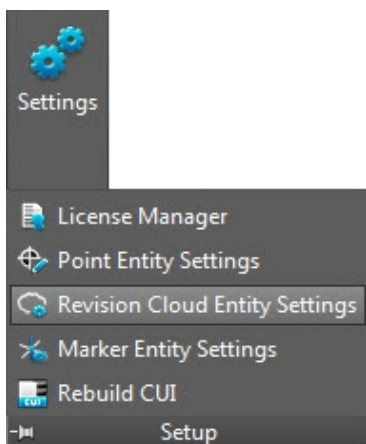


#### Note

You cannot delete a category that is in use. If the category is being used in the software, the  button will be unavailable.

---

## 2.1.4 Revision Cloud Entity Settings



Revision Cloud Entity Settings allow you to define drawings/shapes you want to use to note point revisions. This function works in conjunction with the Import Points → page 62 functionality to identify differences in the original drawing versus the points placed in the field. The revision cloud entity is inserted around a point that does not fit within the tolerance defined for the imported entities.

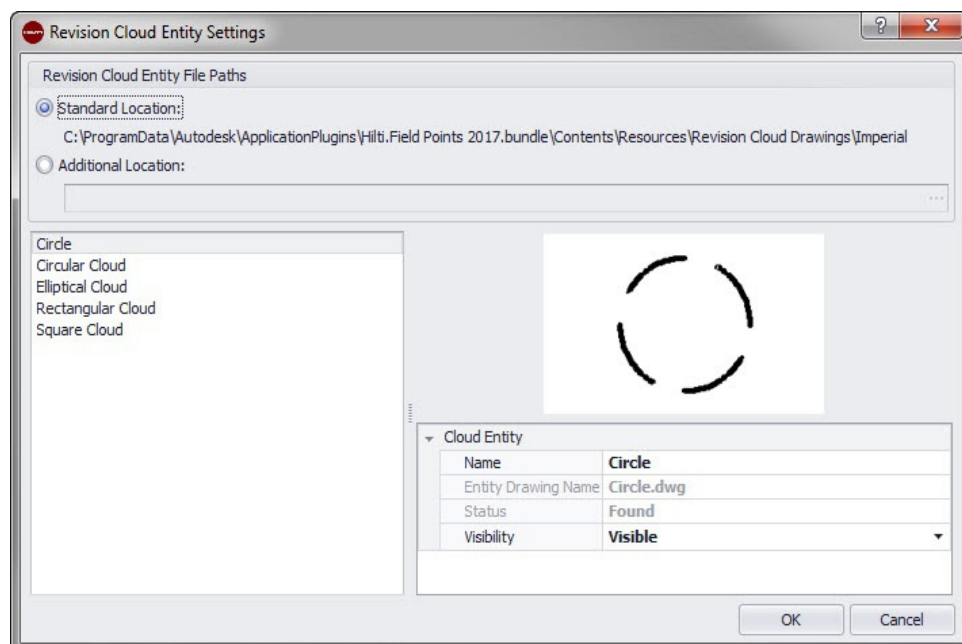
Revision cloud entities can be stored in two locations:

A standard location which is predetermined partially based on your PROFIS Field Points installation

**OR**

**Quick Steps:** **Setup** → ▼

An additional user-defined location.



1. Select your desired working location by clicking **Standard Location** or **Additional Location** option button.



### Note

If you select **Additional Location**, you must also set the additional field point entity location path. You can click ... to navigate to the desired location. The field point entity list is populated based on the contents in the location selected.

1. In the left pane of the window, click on the revision cloud entity you want to work with.
2. In the **Revision Cloud Entity** pane, you can modify the following properties:

### 3. Name

4. Enter the name for this entity. The entity names must be unique across all field point entity file paths. This ensures that you are selecting the correct form from the Entity Name list when you place your field points.

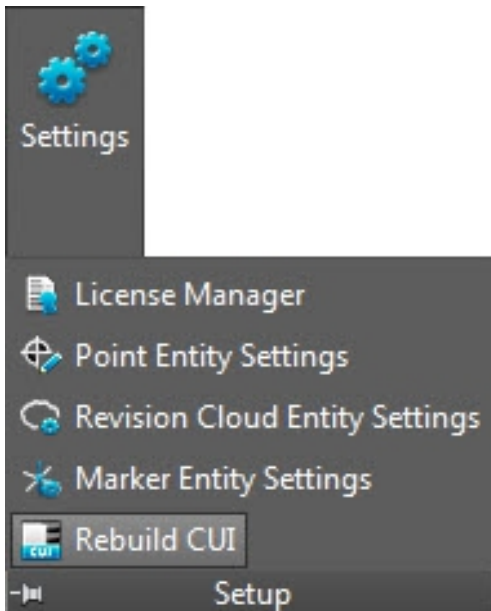
#### Visibility

Click ▼ and select the availability status of the entity from the list. Hidden will hide the entity in the **Entity Name** selection list.

Visible allows the entity to appear in the **Entity Name** selection list.

5. You can modify the properties of all the entities at this location. When you have finished, click **OK** to save your changes.

## 2.1.5 Rebuild CUI



CUI (Custom User Interface) refers to the PROFIS Field Points tab on the ribbon.

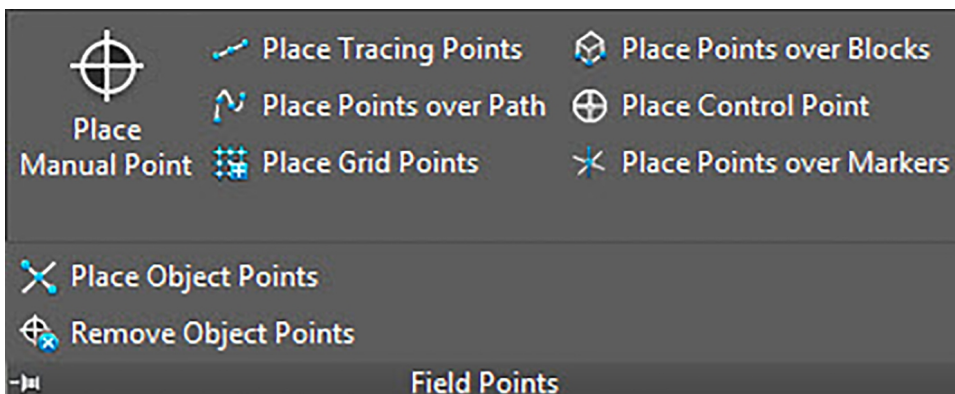
**Quick Steps:** **Setup** → **Rebuild CUI**



#### Note

This is an advanced function in the PROFIS Field Points software. If you are unsure how to use it, please contact your support group for more details.

## 2.2 Field Points



The Field Points group allows you to set markers for various points on your drawing. This information can be exported in formats compatible with many surveying instruments. This allows for faster implementation using your AutoCAD® software platform.

**Quick Steps:** **PROFIS Field Points** → **Field Points**

On the PROFIS Field Points tab, go to the Field Points group. Refer to the topics on the following pages for more information on setting each point type.

**Place Manual Point → page 20**

This function allows you to place individual points manually. Points can be placed anywhere in space or on objects. Properties can be set for layer, annotation placement, starting point number, and elevation. You can also assign up to 5 customized attributes.

**Place Tracing Points → page 23**

Tracing points allow placement of points in a single or double row along the distance to an object. Field Points can be placed at selected points. Alternatively, you can select the start and end points on a segment of a straight object. Intermediate points can then be placed at the spacing of your choice.



**Note**

Tracing points will not follow a polyline.

**Place Points over Path → page 26**

This function allows you to place points along a path. This might be useful for tasks such as curve layout, slab layout, or underground runs. You can place points along arcs, lines, polylines, 3D polylines, or splines.

**Place Grid Points → page 30**

This command allows you to place object points based on the selected number pattern. The points are placed at grid intersections. Properties can be set for layer, annotation placement, entity types, starting point number, elevation, and field point location. You can also assign up to 5 customized attributes.

**Place Points over Blocks → page 32**

This function allows you to place points in a selected block in your drawing.

**Place Control Point → page 35**

Control points are defined by the survey team and are used to coordinate locations on the site or inside a building.

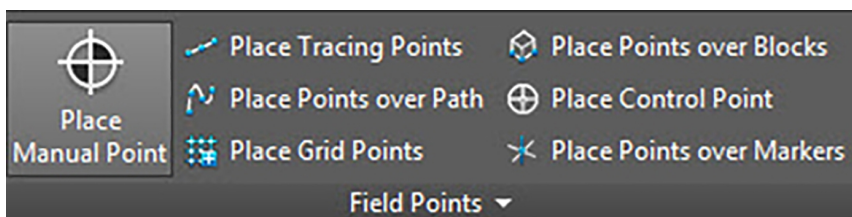
**Place Object Points → page 44**

This command allows you to place object points on primitive AutoCAD® objects such as lines, polylines, circles, and ellipses. Properties can be set for layer, annotation placement, entity types, starting point number, elevation, and field point location. You can also assign up to 5 customized attributes.

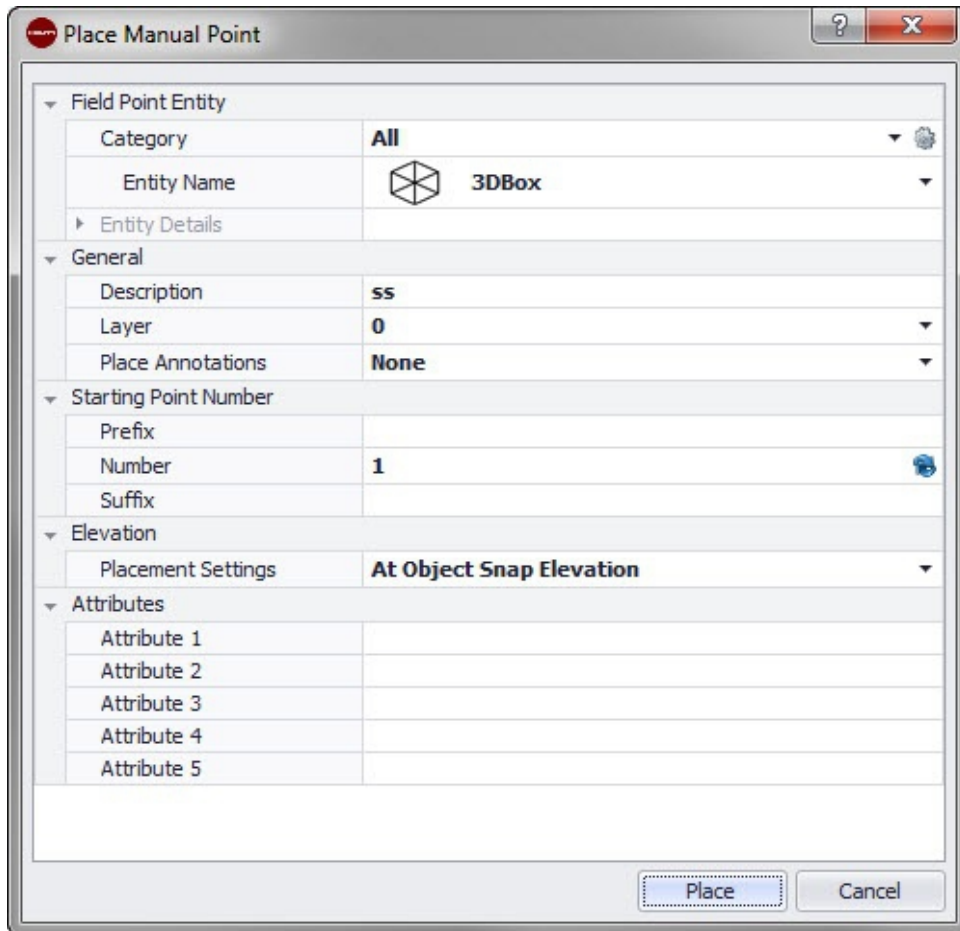
**Remove Object Points → page 47**

This command provides a multiplicity of quickly removable object points for selected entities or for the entity drawing. You can remove object points by entity type, inside blocks and xrefs and at particular field point locations.

## 2.2.1 Place Manual Point



The Place Manual Field Points window allows you to manually place single points. Points can be placed anywhere in space or on objects. Properties can be set for layer, annotation placement, starting point number, and elevation. You can also define up to 5 customized attributes.




### Quick Steps: Field Points → Place Manual Field Point

- Go to the **Field Points** group and then click **Place Manual Point**.
- Proceed as follows to place points on objects:

#### 2.2.1.1 Field Point Entity

##### Category

Click ▼ and select the appropriate category from the list. If you want to change settings, click  next to the **Category** field. The Field Point Settings → page 8 window re-opens. This window allows you to change settings/properties of a field before you set the point.

##### Entity Name

Click ▼ and from the list, select the appropriate **entity name** representing the point or set of field points.

##### Entity Details

Click ► to expand the **Entity Details** pane to view the **Entity Drawing Name**, **File Location**, and **Loaded in Drawing** information pertaining to the field point.



##### Note

These fields are not editable.

#### 2.2.1.2 General

##### Description

Enter a **Description** for this field. This indicates what the field point represents.

##### Layer

Assign this field point to a particular drawing layer by selecting the layer from the list.

##### Place Annotation

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.



#### Note

Annotations contain tagging information for a point and are initially set up in Setup → Settings → page 10.

---

### 2.2.1.3 Starting Point Number

#### Prefix

The prefix is a user-defined identifier automatically inserted in front of the Number field (see the next topic). You can enter up to 6 characters as a prefix.

#### Number

Enter the starting number for this point or set of points. Enter a number between 1 and 999,999,999. If the drawing contains existing points, click 🔄 to get the next number (including the matching prefix and suffix) if you wish to continue the same numbering sequence.

#### Suffix

The suffix is a user-defined identifier automatically inserted behind the Number field (see the preceding topic). You can enter up to 6 characters as a suffix.

---



#### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded.

---

### 2.2.1.4 Elevation

#### Placement Settings

This property defines the elevation placement for the point or set of points. Click ▼ and select a setting from the list.

- **At Object Snap Elevation**
- **At distance From Object Elevation**  
Enter the distance from the object snap elevation (in inches/millimeters, depending on your settings). You must enter a distance if you select this option.
- **At Fixed Elevation**  
Enter the absolute elevation (the point's distance from zero elevation) in inches/millimeters (depending on your settings). You must enter an absolute elevation if you select this option.

### 2.2.1.5 Attributes

You can enter up to 5 attributes to further define the field point or field points. Each attribute can contain 62 characters of information.

---



#### Note

The attribute labels are defined under Setup → Settings → page 10.

---

### 2.2.1.6 Place Points

1. When you have finished defining points properties, click **Place**. The Points dialog closes and your drawing appears on the screen.



- Click the areas in the drawing where you want to place points. You can continue clicking on additional areas in the drawing to place more points.
- When you have placed all your points, press **Enter** on your keyboard. The points are now set at the locations you selected.



**Note**

You can also place one or more points, change your settings, and then continue to place additional points without ending the procedure (by pressing **Enter**). To change settings while placing points, use one of the following options:

In the command bar, you can click on the Settings text.

**OR**

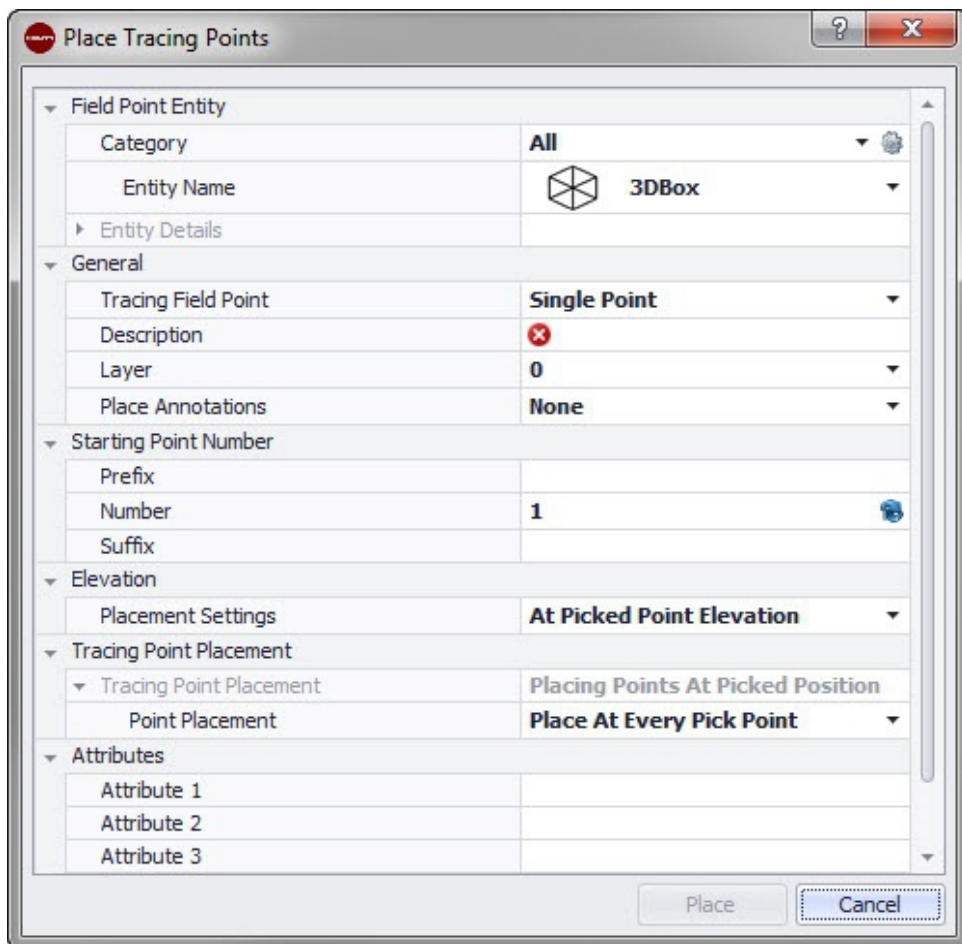
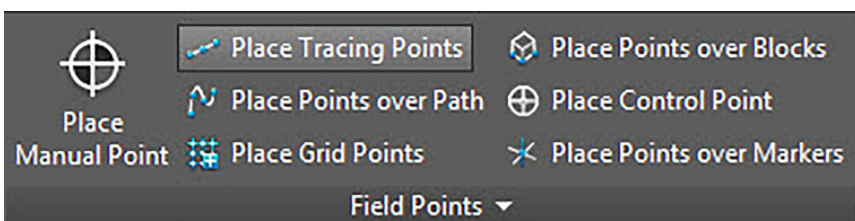
Click in the command bar and then type **S** and press **Enter**.

**OR**

You can right-click and choose Settings from the pop-up menu

The Points dialog re-opens. Refer to the instructions above if you want to change settings.

### 2.2.2 Place Tracing Points



Tracing Points allow placement of points in a single or double row, at the desired elevation, along a distance of an object. Field Points can be placed at selected points.

Alternatively, you can select the start and end points on a segment of a straight object. Intermediate points can then be placed at the spacing of your choice.



#### Note

Tracing points will follow a polyline.


---

### Quick Steps: **Field Points** → **Place Tracing Points**

- Go to the **Field Points** group → click **Place Tracing Points**.
- Proceed as follows to place tracing points in your drawing:

#### 2.2.2.1 Field Point Entity

##### Category

Click ▼ and select the appropriate category from the list. If you want to change settings, click  next to the Category field. The Field Point Settings → page 8 window opens. This window allows you to change settings/properties of a field point entity before you set the point.

##### Entity Name

Click ▼ and from the list, select the appropriate **entity name** representing the field point or set of field points.

##### Entity Details

Click ► to expand the Entity Details pane to view the **Entity Drawing Name**, **File Location**, and the **Loaded in Drawing** information pertaining to the field point.



#### Note

These fields are not editable.

---

#### 2.2.2.2 General

##### Set Tracing Field Point

Click ▼ and select the method Tracing Field Point from the list:

- **Single Point**  
This option allows you to set a single point in your drawing.
- **Single Point with Offset**  
This setting allows you to set an offset when placing a single point. If you select this option you must also enter a value in the Point Offset From Center field.
- **Double Point**  
This function places two points at once using the Offset From Center value (see the description below). You might use this setting when you need to place two parallel rows of rods from a ceiling.

##### Description

Enter a description for this field. This indicates what the field point represents.

##### Layer

Assign this field point to a particular drawing layer by selecting the layer from the list.

##### Place Annotations

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.



#### Note

Annotations contain tagging information for a point and are initially set up in Setup → Settings → page 10.


---

### 2.2.2.3 Starting Point Number

#### Prefix

The prefix is a user-defined identifier automatically inserted in front of the Number field (see the next topic). You can enter up to 6 characters as a prefix.

#### Number

Enter the starting number for this point or set of points. Enter a number between 1 and 999,999,999. If the drawing contains existing points, click  to get the next number (including the matching prefix and suffix) if you wish to continue the same numbering sequence.

#### Suffix

The suffix is a user-defined identifier automatically inserted behind the Number field (see the preceding topic). You can enter up to 6 characters as a suffix.




#### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded.

### 2.2.2.4 Elevation

#### Placement Settings

This property defines the elevation placement for the point or set of points. Click  and select a setting from the list.

- **At Picked Point Elevation**
- **At Distance From Picked Point Elevation**  
Enter the distance from the picked elevation (in inches/millimeters, depending on your settings). You must enter a distance if you select this option.
- **At Fixed Elevation**  
Enter the absolute elevation (the point's distance from zero elevation) in inches/millimeter (depending on your settings). You must enter an absolute elevation if you select this option.

### 2.2.2.5 Tracing Point Placement

#### Point Placement

Click  and select a placement option from the list.



#### Note

If you select point placement to place intermediate points, you must also set the following options:

#### Spacing between Points

Enter the distance between points in inches/millimeters (depending on your settings).

#### Minimum Distance Between Points

Click the checkbox if you want to use a minimum distance between points. You must also enter the Minimum Distance Between Points in inches/millimeters (depending on your settings).

### 2.2.2.6 Attributes

You can enter up to 5 attributes to further define the field point or field points. Each attribute can contain 62 characters of information.



## Note

The attribute labels are defined under Setup → Settings → page 10.

### 2.2.2.7 Place Points

1. When you have finished defining points properties, click Place. The Points dialog closes and your drawing appears on the screen.
2. Click the areas in the drawing where you want to place points. You can continue clicking on additional areas in the drawing to place more points.
3. When you have placed all your points, press **Enter** on your keyboard. The points are now set at the locations you selected.



## Note

You can also place one or more points, change your settings, and then continue to place additional points without ending the procedure (by pressing **Enter**). To change settings while placing points, use one of the following options:

In the command bar, you can click on the Settings text.

**OR**

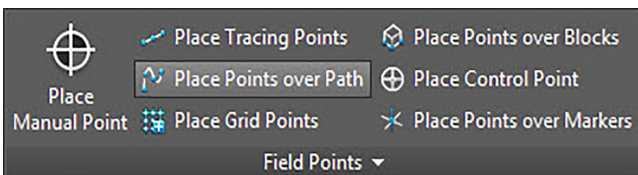
Click the command bar and then type **S** and press **Enter**.

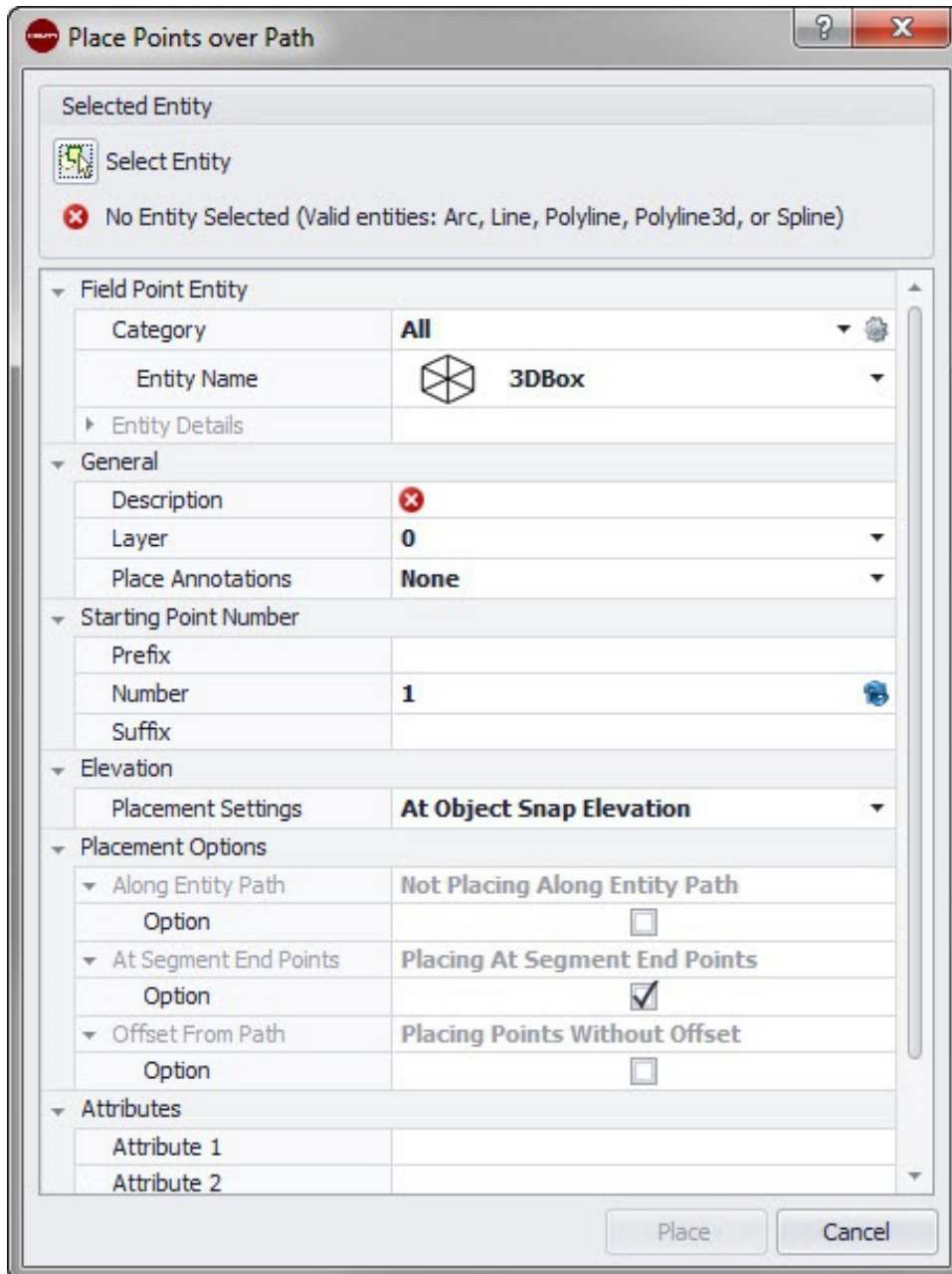
**OR**

You can right-click and choose **Settings** from the pop-up menu.

The Points dialog re-opens. Refer to the instructions above if you want to change settings.

### 2.2.3 Place Points over Path





This function allows you to place points along a path. This might be useful for tasks such as curve layout, slab layout, or underground runs. You can place points along arcs, lines, polylines, 3D polylines, or splines.

**Quick Steps: Field Points → Place Points over Path**

1. Go to the Field Points group and click Place Points over Path.
2. Click Select Entity. Select the object in your drawing you want to place points over.  
You can select only one entity at a time for point placement.
3. Proceed as follows to place points on your drawing:

**2.2.3.1 Field Point Entity**

**Category**

Click ▼ and select the appropriate category from the list. If you want to change settings, click ⚙ next to the Category field. The Field Point Settings → page 15 window opens. This window allows you to change settings/properties of a field before you set the point.

**Entity Name**

Click ▼ and from the list, select the appropriate entity name representing the field point or set of field points.

## Entity Details

Click ► to expand the Entity Details pane to view the **Entity Drawing Name**, **File Location**, and the **Loaded in Drawing** information pertaining to the field point.



### Note

These fields are not editable.

---

## 2.2.3.2 General

### Description

Enter a **Description** for this field. This indicates what the field point represents.

### Layer

Assign this field point to a particular drawing layer by selecting the layer from the list.

### Place Annotations

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.



### Note

Annotations contain tagging information for a point and are initially set up in Setup → Settings → page 10.

---

## 2.2.3.3 Starting Point Number

### Prefix

The prefix is a user-defined identifier automatically inserted in front of the Number field (see the next topic). You can enter up to 6 characters as a prefix.

### Number

Enter the starting number for this point or set of points. Enter a number between 1 and 999,999,999. If the drawing contains existing points, click 🔄 to get the next number (including the matching prefix and suffix) if you wish to continue the same numbering sequence.

### Suffix

The suffix is a user-defined identifier automatically inserted behind the Number field (see the preceding topic). You can enter up to 6 characters as a suffix.



### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded.

---

## 2.2.3.4 Elevation

### Placement Settings

This property defines the elevation placement for the point or set of points. Click ▼ and select a setting from the list.

- **At Object Snap Elevation**
- **At Distance From Object Snap Elevation**

Enter the distance from the object snap elevation (in inches/millimeters, depending on your settings). You must enter a distance if you select this option.

- **At fixed Elevation**

Enter the absolute elevation (the point's distance from zero elevation) in inches/millimeters (depending on your settings). You must enter an absolute elevation if you select this option.

### 2.2.3.5 Placement Options

#### Along Entity Path

**Note**

This field is not editable.

- 
1. If applicable, select the option checkbox .
  2. Enter the values for Spacing Between Points and Start Point Offset.

**Note**

The Start Point Offset field allows you to specify a distance from the start point for placing the path point.

- 
1. The Minimum Distance Between Points field is not editable. However, you must make the following settings:
    - If applicable, select the Use Minimum Distance checkbox .
    - Enter a value in the Minimum Distance Between Points field.

#### A Segment End Points

This field is not directly editable but its content changes to suit your selection in the **Option** field.

If applicable, select the option checkbox .

**Note**

When you select this option, points will be placed at the end of segments of a polyline and 3D polyline.

#### Offset From Path

This option allows you to place points with an offset.

1. If applicable, select the option checkbox .
2. Enter an offset distance.

### 2.2.3.6 Attributes

You can enter up to 5 attributes to further define the field point or field points. Each attribute can contain 62 characters of information.

**Note**

The attribute labels are defined under Setup → Settings → page 10.

### 2.2.3.7 Place Points

1. When you have finished defining points properties, click Place. The Points dialog closes and your drawing appears on the screen.
2. Click the areas in the drawing where you want to place points. You can continue clicking on additional areas in the drawing to place more points.

3. When you have placed all your points, press **Enter** on your keyboard. The points are now set at the locations you selected.



### Note

You can also place one or more points, change your settings, and then continue to place additional points without ending the procedure (by pressing **Enter**). To change settings while placing points, use one of the following options:

In the command bar, you can click on the Settings text.

### OR

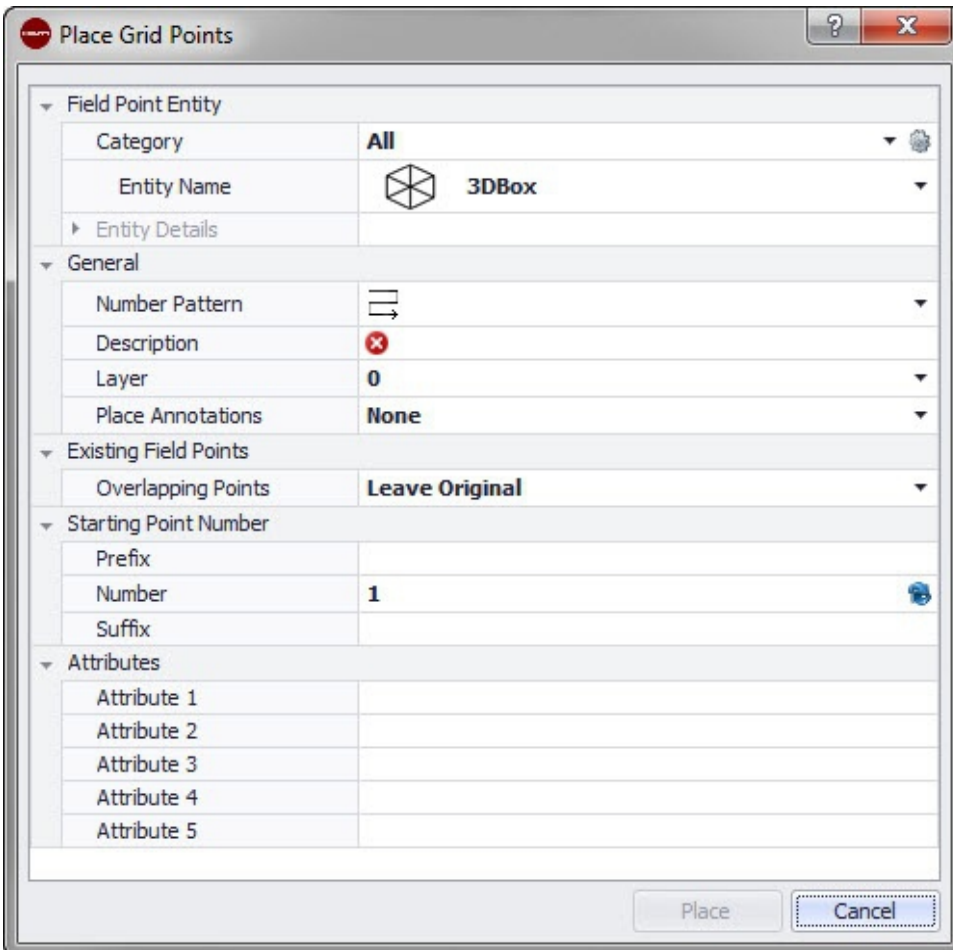
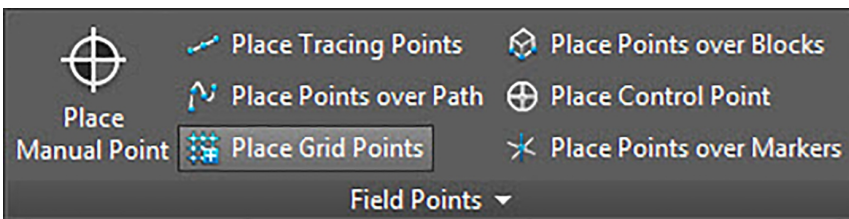
Click in the command bar and then type **S** and press **Enter**.

### OR

You can right-click and choose Settings from the pop-up menu.

The Points dialog re-opens. Refer to the instructions above if you want to change settings.

## 2.2.4 Place Grid Points



This command allows you to place object points based on the selected number pattern. Points are placed at grid intersections. Properties can be set for layer, annotation placement, entity types, starting point number, elevation, and field point location. You can also assign up to 5 customized attributes.




## Quick Steps: **Field Points** → **Place Grid Points**

- Go to the Field Points group and click Place Grid Points.
- Proceed as follows to place grid points in your drawing:

### 2.2.4.1 Field Point Entity

#### Category

Click ▼ and select the appropriate category from the list. If you want to change settings, click  next to the Category field. The Field Point Settings → page 15 window opens. This window allows you to change settings/properties of a field point entity before you set the point.

#### Entity Name

Click ▼ and from the list, select the appropriate entity name representing the field point or set of field points.

#### Entity Details

Click ► to expand the Entity Details pane to view the Entity Drawing Name, File Location, and the Loaded in Drawing information pertaining to the field point.



#### Note

These fields are not editable.

---

### 2.2.4.2 General

#### Number Pattern

The Number Pattern field allows you to select a pattern so that points are placed and numbered around the grid intersections. Click ▼ to select the desired pattern from the list.

#### Description

Enter a description for this field. This indicates what the field point represents.

#### Layer

Assign this field point to a particular drawing layer by selecting the layer from the list.

#### Place Annotations

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.



#### Note

Annotations contain tagging information for a point and are initially set up in Setup → Settings → page 10.

---

### 2.2.4.3 Existing Field Points

#### Overlapping Points


This field allows you to choose how overlapping points are handled. Click ▼ in the Overlapping Point field and select the desired option from the list.

### 2.2.4.4 Starting Point Number

#### Prefix

The prefix is a user-defined identifier automatically inserted in front of the Number field (see the next topic). You can enter up to 6 characters as a prefix.

#### Number

Enter the starting number for this point or set of points. Enter a number between 1 and 999,999,999. If the drawing contains existing points, click  to get the next number

(including the matching prefix and suffix) if you wish to continue the same numbering sequence.

### Suffix

The suffix is a user-defined identifier automatically inserted behind the Number field (see the preceding topic). You can enter up to 6 characters as a suffix.



#### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded.

---

### 2.2.4.5 Attributes

You can enter up to 5 attributes to further define the field point or field points. Each attribute can contain 62 characters of information.



#### Note

The attribute labels are defined under Setup → Settings → page 10.

---

### 2.2.4.6 Place Points

1. When you have finished defining points properties, click Place. The Points dialog closes and your drawing appears on the screen.



#### Note

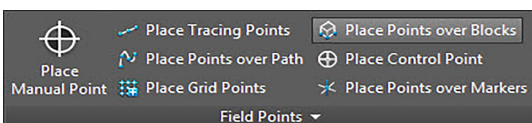
You can place grid points only on line objects. If the grid consists of polylines, you must explore them first.

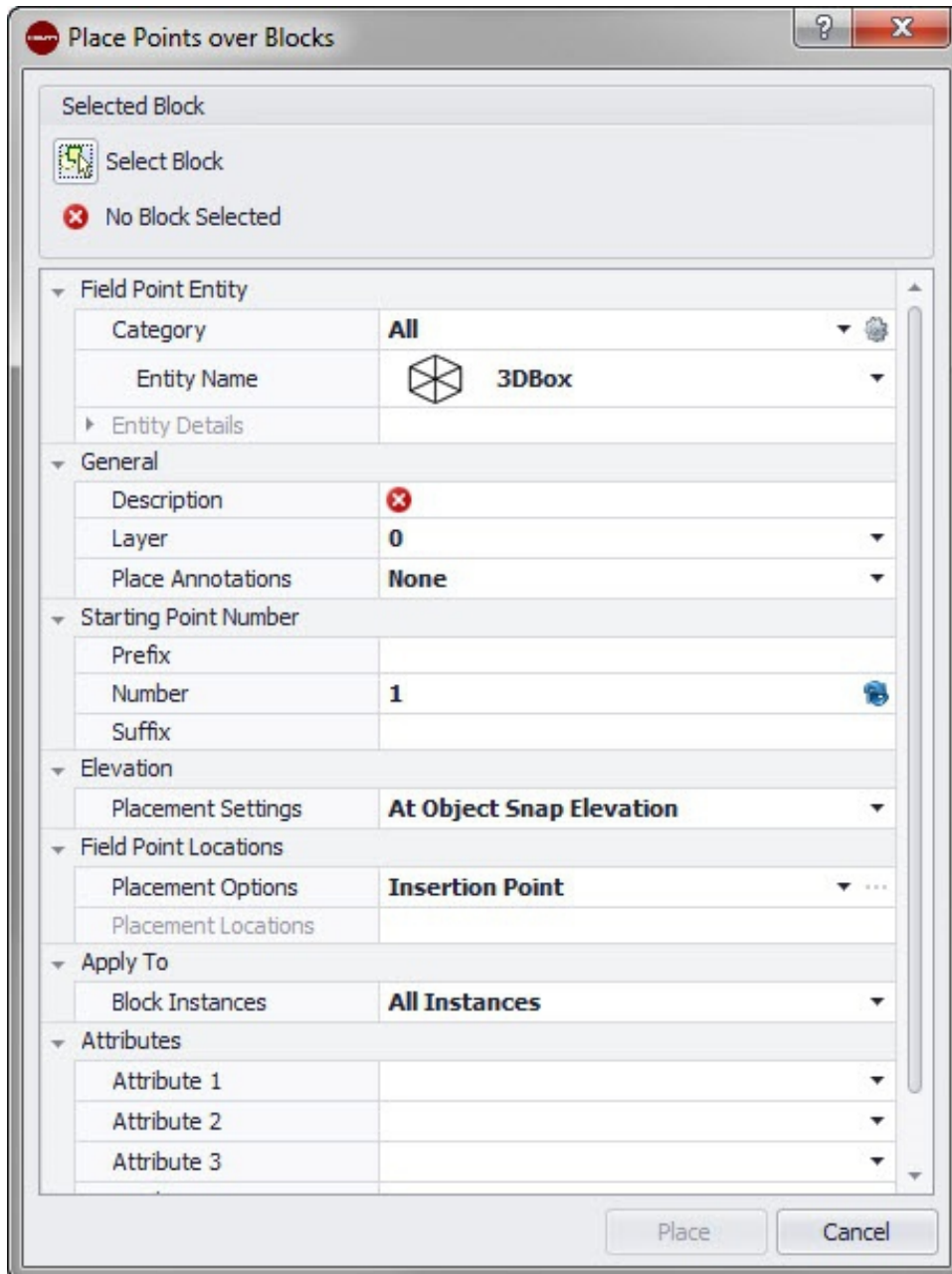
---

1. You have the option of accepting the selection or removing grid lines.

When you accept the grid selection, grid points are set.

### 2.2.5 Place Points over Blocks





This function allows you to place points on a selected block in your drawing.

**Quick Steps: Field Points → Place Points over Blocks**

1. Go to the Field Points group and then click Place Points over Blocks.
2. Click Select Block. Select the Block in your drawing to place points over.
3. Proceed as follows to place points over a block in your drawing:

**2.2.5.1 Field Point Entity**

**Category**

Click ▼ and select the appropriate category from the list. If you want to change settings, click ⚙ next the Category field. The Field Point Settings → page 8 window opens. This window allows you to change settings/properties of a field point entity before you set the point.

**Entity Name**

Click ▼ and from the list, select the appropriate entity name representing the field point or set of field points.

**Entity Details**

Click ► to expand the entity Details pane to view the Entity Drawing Name, File Location, and Loaded in Drawing information pertain to the field point.



#### Note

These field are not editable.

---

### 2.2.5.2 General

#### Description

Enter a description for this field. This indicates what the field point represents.

#### Layer

Assign this field point to a particular drawing layer by selecting the layer from the list.

#### Place Annotations

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.

---



#### Note

Annotations contain tagging information for a point and are initially set up in Setup → Settings → page 10.

---

### 2.2.5.3 Elevation

#### Placement Settings

This property defines the elevation placement for a point or set of points. Click ▼ and select a setting from the list.

- **At Object Snap Elevation**
- **At Distance From Object Snap Elevation**  
Enter the distance from the object snap elevation (in inches/millimeters, depending on your settings). You must enter a distance if you select this option.
- **At fixed Elevation**  
Enter the absolute elevation (the point's distance from zero elevation) in inches/millimeters (depending on your settings). You must enter an absolute elevation if you select this option.

### 2.2.5.4 Field Point Location

#### Placement Options

Click ▼ and select the appropriate option from the list.

- If you select Insertion Point, the point is placed on the insertion point of the block.
- If you select Custom Points, you must open the block editor by clicking ... and then select the placement points. Touch each point on the block where you want to set a field point. Then click . This will return you to the Place Field Point over Block dialog.

#### Placement Locations

This field displays the coordinates of the points you are placing. The coordinates are relative to the insertion point (for example, if your placement option is set to insertion point, this will show the point at 0,0,0). All points are listed, so you can always check the number of points you have set in each instance of that block.

---



#### Note

Each point has its own coordinates listed.

---

### 2.2.5.5 Apply To

The **Apply To Selection** list allows you to specifically select what you want when placing points over blocks.

- **All Instances**  
Allows you to apply placement to all blocks within the block reference.
- **Current Instance**  
Allows you to apply placement to the block currently selected (only one block).
- **Selected Instance**  
Allows you to select multiples within the same block reference.

### 2.2.5.6 Attributes

You can select up to 5 attributes:

- Base\_unit\_of\_measure: Shows the unit of measure (inches or meters)
- Certificates: Shows product certificates
- Homepage: Shows the product homepage
- Manufacturer: Shows the product manufacturer
- Part\_no.: Shows the part number



#### Note

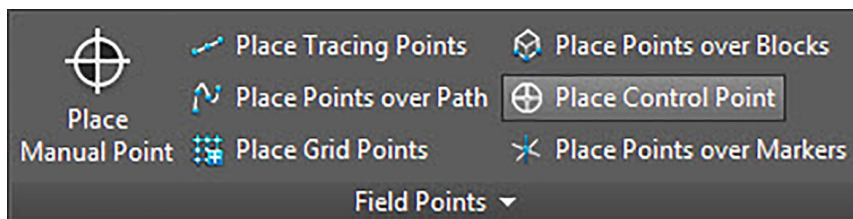
The attribute labels are created under Setup → Settings → page 10.

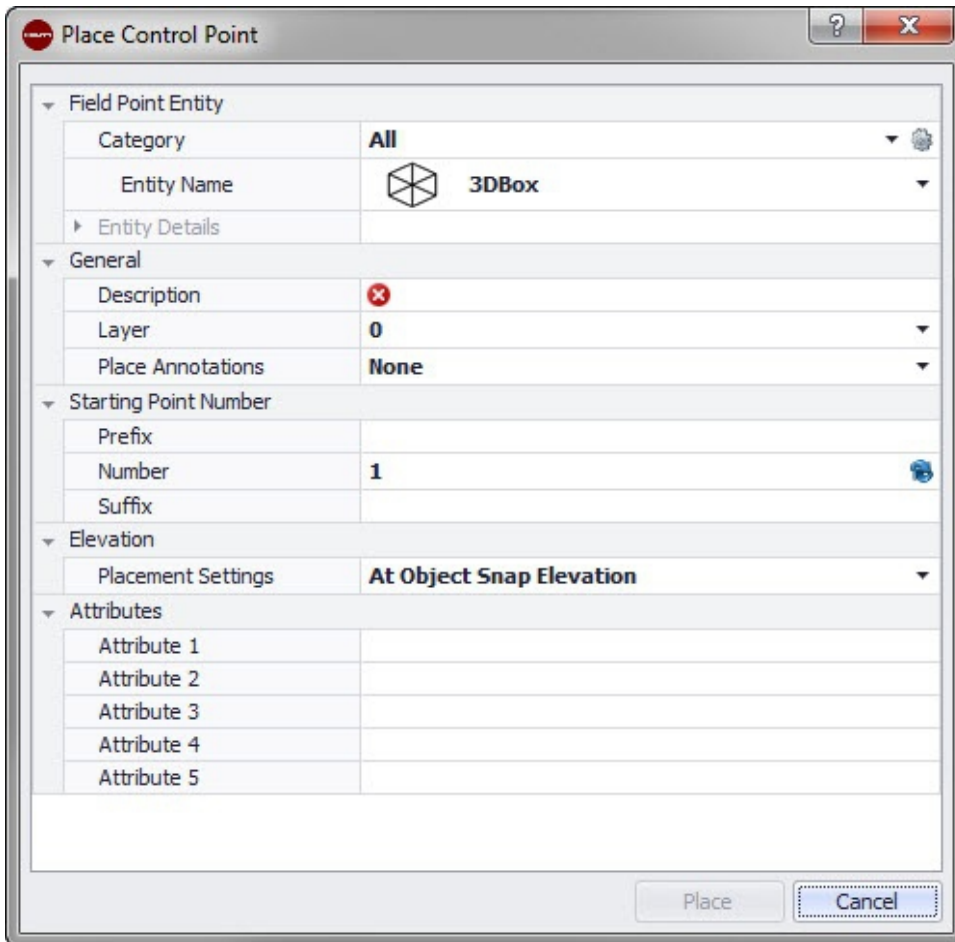
---

### 2.2.5.7 Place Points

When you have finished setting points properties, click Place. The Points dialog closes and your drawing appears on the screen with the selected block and the defined points.

### 2.2.6 Place Control Point





Control points are defined by the survey team and are used to coordinate locations on the site or inside of a building.

**Quick Steps: Field Points** → **Place Control Point**

1. Go to the Field Points group and the click Place Control Point.
2. Proceed as follows to place points on objects:

**2.2.6.1 Field Point Entity**

**Category**

Click ▼ and select the appropriate category from the list. If you want to change settings, click ⚙ next to the Category field. The Field Point Settings → page 15 window opens. This window allows you to change settings/properties of a field before you set the point.

**Entity Name**

Click ▼ and from the list, select the appropriate entity name representing the field point or set of field points.

**Entity Details**

Click ► to expand the **Entity Details** pane to view the **Entity Drawing Name**, **File Location**, and the **Loaded in Drawing** information pertaining to the field point.



**Note**

These fields are not editable.

**2.2.6.2 General**

**Description**

Enter a description for this field. This indicates what the field point represents.

**Entity Name**

Click ▼ and from the list, select the appropriate entity name representing the field point or set of field points.

### Place Annotations

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.



#### Note

Annotations contain tagging information for a point and are initially set up in Setup / Settings → page 10.

---

### 2.2.6.3 Starting Point Number

#### Prefix

The prefix is a user-defined identifier automatically inserted in front of the Number field (see the next topic). You can enter up to 6 characters as a prefix.

#### Number

Enter the starting number for this point or set of points. Enter a number between 1 and 999,999,999. If the drawing contains existing points, click 🔍 to get the next number (including the matching prefix and suffix) if you wish to continue the same numbering sequence.

#### Suffix

The suffix is a user-defined identifier automatically inserted behind the Number field (see the preceding topic). You can enter up to 6 characters as a suffix.

---



#### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded.

---

### 2.2.6.4 Elevation

#### Placement Settings

This property defines the elevation placement for a point or set of points. Click ▼ and select a setting from the list.

- **At Object Snap Elevation**
- **At Distance From Object Snap Elevation**  
Enter the distance from the object snap elevation (in inches/millimeters, depending on your settings). You must enter a distance if you select this option.
- **At fixed Elevation**  
Enter the absolute elevation (the point's distance from zero elevation) in inches/millimeters (depending on your settings). You must enter an absolute elevation if you select this option.

### 2.2.6.5 Attributes

You can enter up to 5 attributes to further define the field point or field points. Each attribute can contain 62 characters of information.

---



#### Note

The attribute labels are defined under Setup → Settings → page 10.

---

### 2.2.6.6 Place Points

1. When you have finished defining points properties, click Place. The Points dialog closes and your drawing appears on the screen.
2. Click the areas in the drawing where you want to place points.
3. You can continue clicking on additional areas in the drawing to place more points.
4. When you have placed all your points, press **Enter** on your keyboard. The points are now set at the locations you selected.



#### Note

You can also place one or more points, change your settings, and then continue to place additional points without ending the procedure (by pressing **Enter**). To change settings while placing points, use one of the following options:

In the command bar, you can click on the Settings text.

#### OR

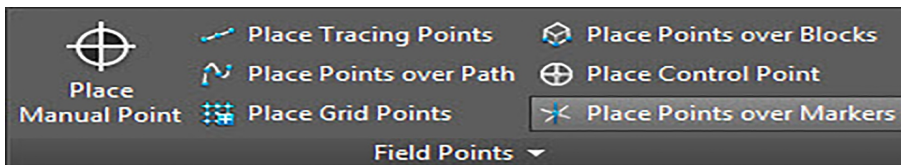
Click in the command bar and then type **S** and press **Enter**.

#### OR

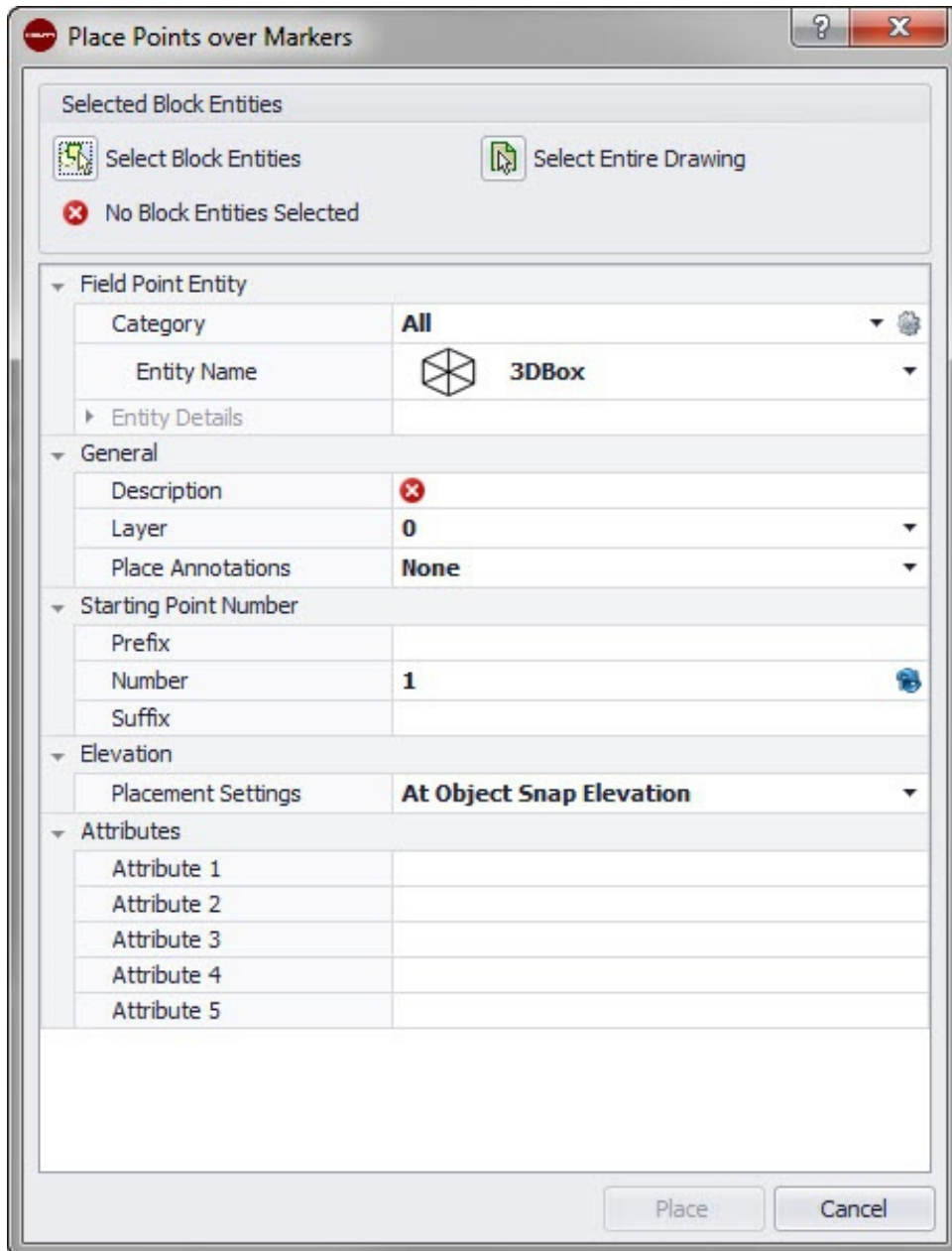
You can right-click and choose Settings from the pop-up menu.

The Points dialog re-opens. Refer to the instructions above if you want to change settings.

### 2.2.7 Place Points Over Markers







This command allows you to place field points on a block containing a marker, or place holder, in a block.

**Quick Steps: Field Points → Place Points Over Markers**

1. Go to the Field Points group and then click Place Points Over Markers.
2. Proceed as follows:

**2.2.7.1 Field Point Entity**

**Category**

Click ▼ and select the appropriate category from the list. If you want to change settings, click ⚙ next to the Category field. The Field Point Settings → page 15 window opens. This window allows you to change settings/properties of a field before you set the point.

**Entity Name**

Click ▼ and from the list, select the appropriate entity name representing the field point or set of field points.

**Entity Details**

Click ► to expand the **Entity Details** pane to view the **Entity Drawing Name**, **File Location**, and the **Loaded in Drawing** information pertaining to the field point.



### Note

These fields are not editable.

---

## 2.2.7.2 General

### Description

Enter a description for this field. This indicates what the field point represents.

### Layer

Assign this field point to a particular drawing layer by selecting the layer from the list.

### Place Annotations

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.

---



### Note

Annotations contain tagging information for a point and are initially set up in Setup → Settings → page 10.

---

## 2.2.7.3 Starting Point Number

### Prefix

The prefix is a user-defined identifier automatically inserted in front of the Number field (see the next topic). You can enter up to 6 characters as a prefix.

### Number

Enter the starting number for this point or set of points. Enter a number between 1 and 999,999,999. If the drawing contains existing points, click 🔄 to get the next number (including the matching prefix and suffix) if you wish to continue the same numbering sequence.

### Suffix

The suffix is a user-defined identifier automatically inserted behind the Number field (see the preceding topic). You can enter up to 6 characters as a suffix.

---



### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded.

---

## 2.2.7.4 Elevation

### Placement Settings

This property defines the elevation placement for the point or set of points. Click ▼ and select a setting from the list.

- **At Object Snap Elevation**
- **At Distance From Object Snap Elevation**  
Enter the distance from the object snap elevation (in inches/millimeters, depending on your settings). You must enter a distance if you select this option.
- **At fixed Elevation**  
Enter the absolute elevation (the point's distance from zero elevation) in inches/millimeters (depending on your settings). You must enter an absolute elevation if you select this option.

### 2.2.7.5 Attributes

You can enter up to 5 attributes to further define the field point or field points. Each attribute can contain 62 characters of information.



#### Note

The attribute labels are defined under Setup → Settings → page 10.

---

### 2.2.7.6 Place Points

1. When you have finished defining points properties, click Place. The Points dialog closes and your drawing appears on the screen.
2. Click the areas in the drawing where you want to place points. You can continue clicking on additional areas in the drawing to place more points.
3. When you have placed all your points, press **Enter** on your keyboard. The points are now set at the locations you selected.



#### Note

You can also place one or more points, change your settings, and then continue to place additional points without ending the procedure (by pressing **Enter**). To change settings while placing points, use one of the following options:

In the command bar, you can click on the Settings text.

#### OR

Click in the command bar and then type **S** and press **Enter**.

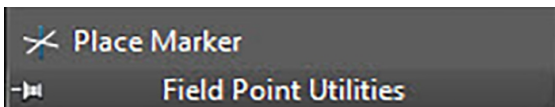
#### OR

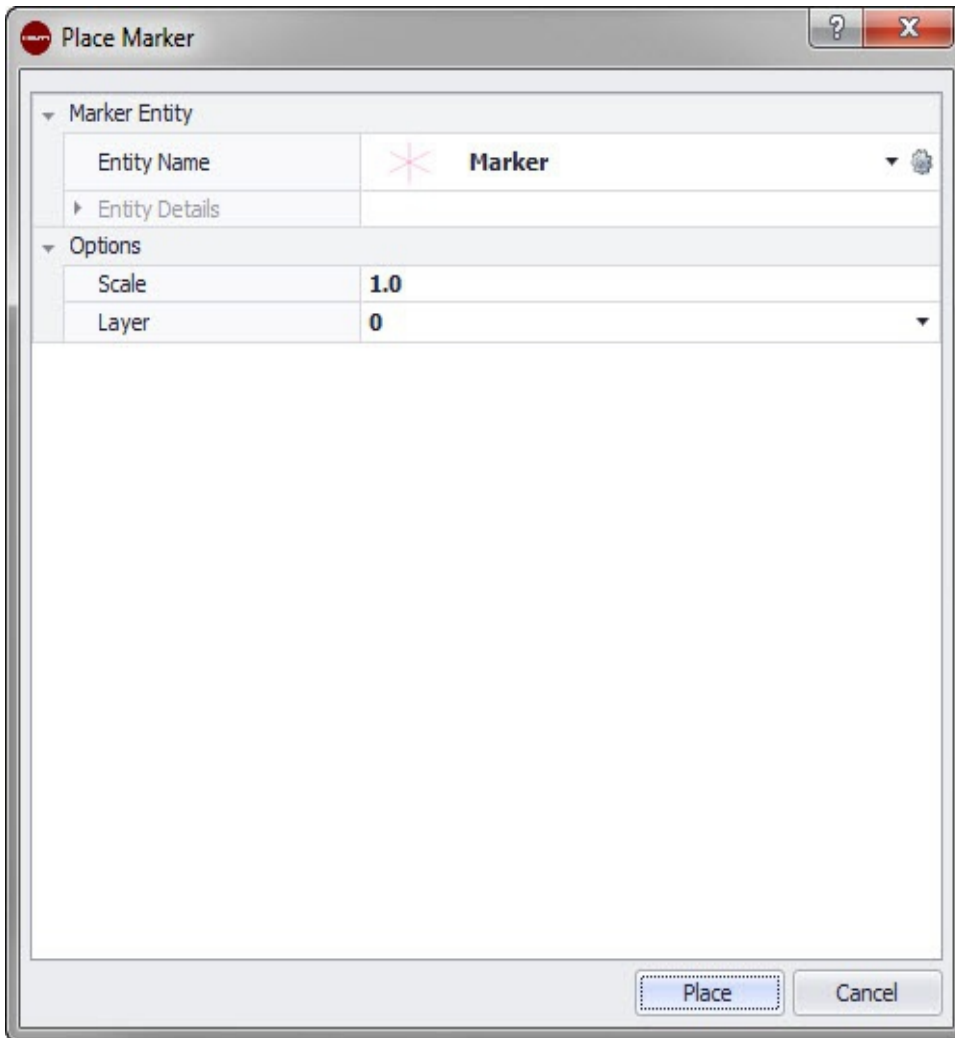
You can right-click and choose Settings from the pop-up menu.

---

The Points dialog re-opens. Refer to the instructions above if you want to change settings.

### 2.2.7.7 Place Markers (Blocks)






This command inserts the markers (placeholders) within a block. You can then use the Place Points over Markers → page 38 command to place field points over the block markers.

**Quick Steps:** Open **Block File** → **PROFIS Field Points** → **Place Marker**

1. Double-click on the block file you want to work with. The Edit Block Definition dialog opens.
2. Click **OK**
3. Go to the **Hilti** Marker Points tab and click Place Marker.
4. In the Entity Name field click ▼ and select a name from the list.

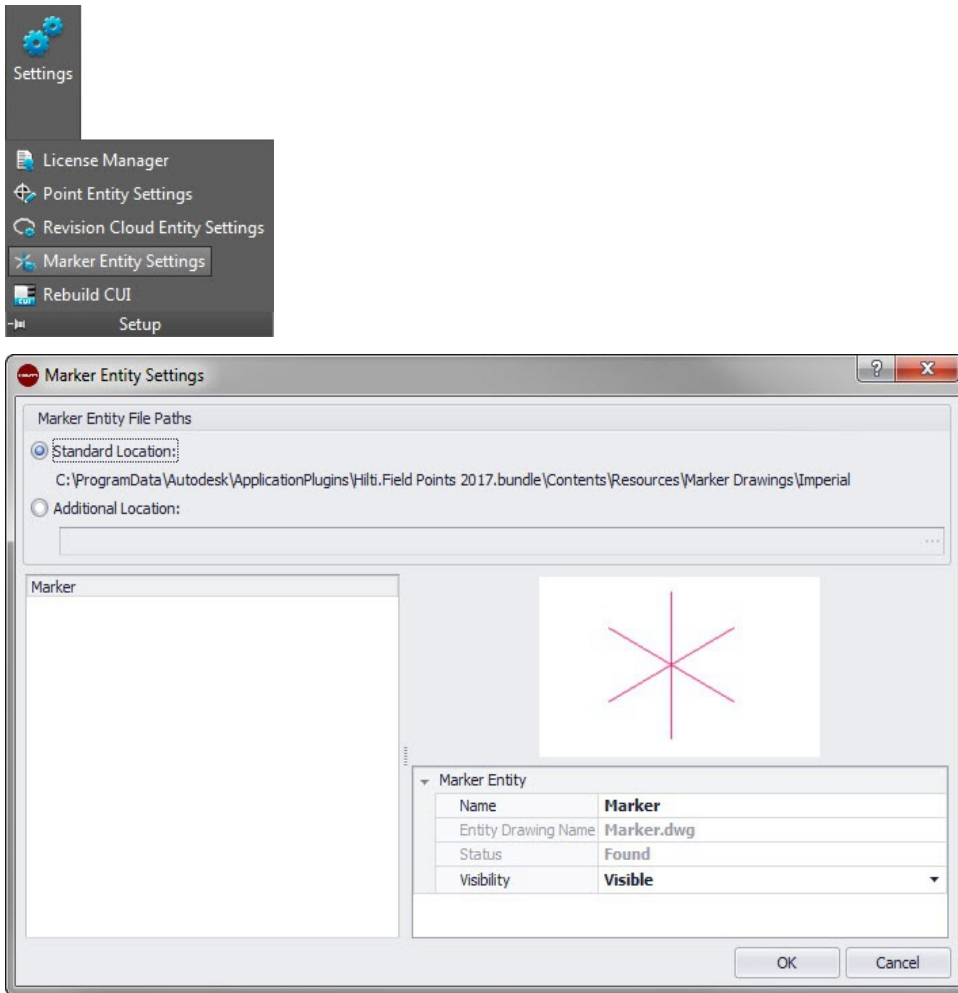


#### Note

You can change the default settings for markers by clicking  next to the Entity Name field.

- 
- Click ► to view entity details. These data cannot be edited in this dialog
  - Click **Place**.

## 2.2.7.8 Marker Entity Settings



The Marker Entity Settings command allows you to set defaults for marker settings.

**Quick Steps:** Open **Block File** → **Hilti Marker Points** → **Place Marker** → 

Open **Block File** → **Hilti Marker Points** → **Place Marker** → **Marker Entity Settings**



### Note

If you select Additional Location, you must also set the additional field point entity location path. You can click ... to navigate to the desired location. The Marker Entity File Paths list is populated based on the contents in the location selected.

1. To modify properties of a marker, proceed as follows:
2. Select your working location by clicking the Standard Location or Additional Location option button, as applicable.
3. In the left pane of the window, click on the marker you want to work with.
4. In the Marker Entity pane, modify the following properties:

#### **Name**

Enter a name for this marker. The entity names must be unique across all marker file paths. This ensures that you are selecting the correct entity from the Marker Name list when you place your field points.

#### **Block Name**

This field displays the actual model file name (not editable).

#### **Status**

This field displays information about the current condition of the model file, such as Found or Not Found (not editable).

#### **Visibility**

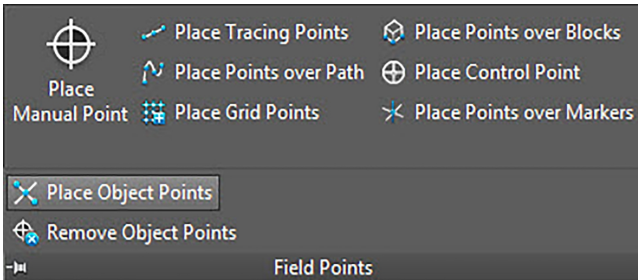
Click ▼ and select the availability status of the entity from the list.

Hidden will hide the entity in the Entity Name selection list.

Visible allows the entity to appear in the Entity Name selection list.

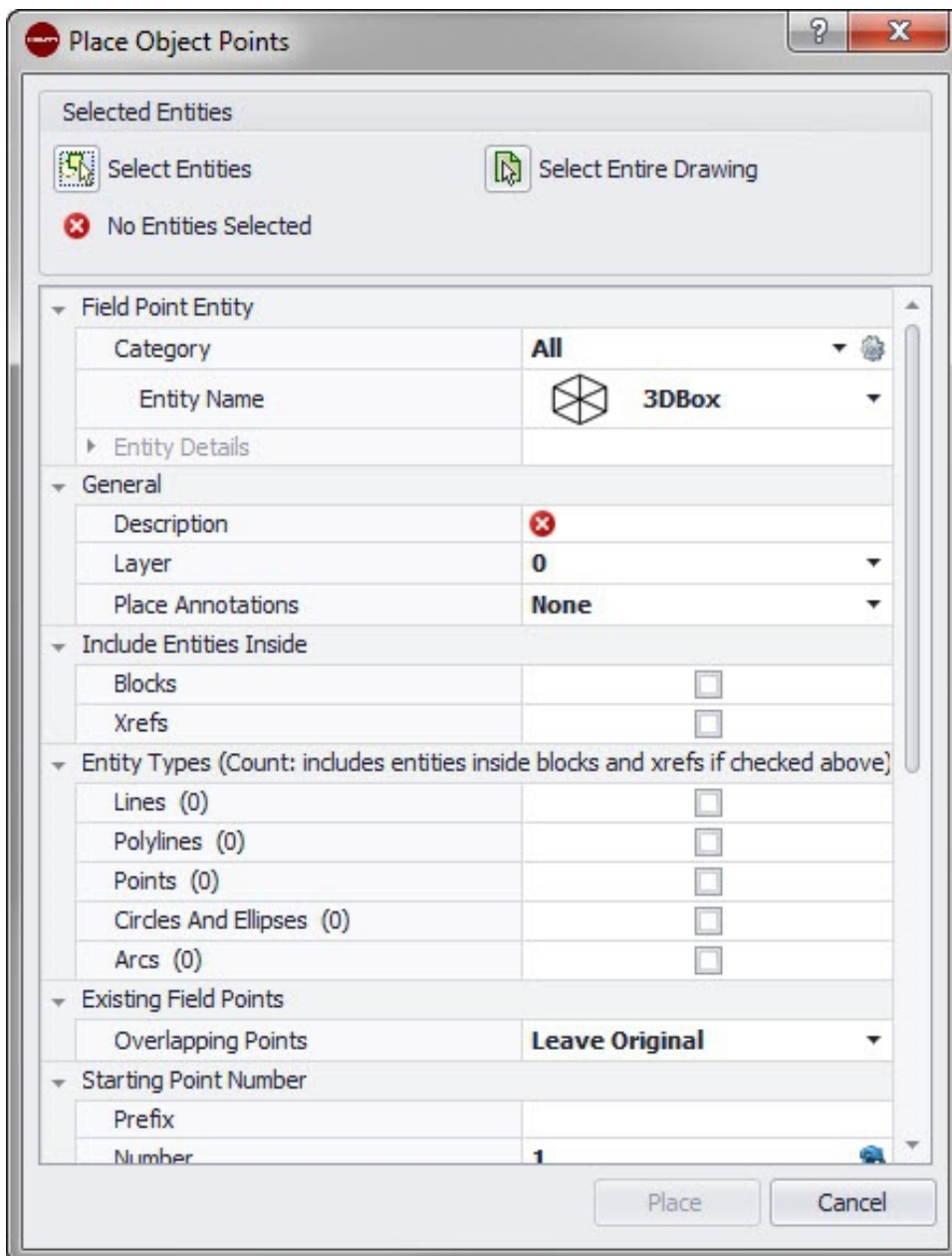
5. You can modify the properties of all the markers at this location. When you have finished click OK to save your changes.

## 2.2.8 Place Object Points



This function allows for automatic generation of custom field points, such as lines, rectangles, circles, background drawings and so on. Custom points can also be placed on entities with Xrefs and blocks.

**Quick Steps: Field Points → Place Object Points**



1. Go to the Field Points group, click ▼ next to the Field Points group label.
2. Click **Place Object Points**.
3. In the Selected Entities pane, click one of the following:

#### **Select Entities**

This option allows you to choose entities for object points. When you have finished selecting the points you want to place, press **Enter** on your keyboard. The **Place Object Points** window re-opens.


#### **Select Entire Drawing**

All object points are selected from the drawing.

4. Proceed as follows to place on objects:

### **2.2.8.1 Field Point Entity**

#### **Category**

Click ▼ and select the appropriate category from the list. If you want to change settings, click  next to the Category field. The Field Point Settings → page 15 window opens. This window allows you to change settings/properties of a field before you set the point.

#### **Entity Name**

Click ▼ and from the list, select the appropriate entity name representing the field point or set of field points.

#### **Entity Details**

Click ► to expand the Entity Details pane to view the **Entity Drawing Name**, **File Location**, and the **Loaded in Drawing** information pertaining to the field point.



#### **Note**

These fields are not editable.

---

### **2.2.8.2 General**

#### **Description**

Enter a description for this field. This indicates what the field point represents.

#### **Layer**

Assign this field point to a particular drawing layer by selecting the layer from the list.

#### **Place Annotations**

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.



#### **Note**

Annotations contain tagging information for a point and are initially set up in Setup → Settings → page 10.

---

### **2.2.8.3 Include Entities Inside**

Select the appropriate checkboxes  based on what you want included in the object points.

- Blocks
- Xrefs

### **2.2.8.4 Entity Types**



#### **Note**

You must select at least one option in this section.

---

Select the appropriate checkboxes  based on the entity types you want included:

- **Lines**

This option places object points on selected lines. After the objects have been selected, the number of line entities included in object placement is displayed.

- **Polylines**

This option places object points on polylines. After the objects have been selected, the number of line entities included in object placement is displayed.

- **Points**

This option places object points on points. After the objects have been selected, the number of line entities included in object placement is displayed.

- **Circles and Ellipses**

This option places object points on circles and ellipses. After the objects have been selected, the number of line entities included in object placement is displayed.

- **Arcs**

This option places object points on arcs. After the objects have been selected, the number of line entities included in object placement is displayed.

### 2.2.8.5 Existing Points

#### Overlapping Points


This field allows you to choose how overlapping points are handled. Click ▼ in the **Overlapping Points** field and select the desired option from the list.

### 2.2.8.6 Starting Point Number

#### Prefix

The prefix is a user-defined identifier automatically inserted in front of the Number field (see the next topic). You can enter up to 6 characters as a prefix.

#### Number

Enter the starting number for this point or set of points. Enter a number between 1 and 999,999,999. If the drawing contains existing points, click  to get the next number (including the matching prefix and suffix) if you wish to continue the same numbering sequence.

#### Suffix

The suffix is a user-defined identifier automatically inserted behind the Number field (see the preceding topic). You can enter up to 6 characters as a suffix.



#### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded.

---

### 2.2.8.7 Elevation

#### Placement Settings

This property defines the elevation placement for the point or set of points. Click ▼ and select a setting from the list.

- **At Object Snap Elevation**

- **At Distance From Object Snap Elevation**

Enter the distance from the object snap elevation (in inches/millimeters, depending on your settings). You must enter a distance if you select this option.



- **At fixed Elevation**

Enter the absolute elevation (the point's distance from zero elevation) in inches/millimeters (depending on your settings). You must enter an absolute elevation if you select this option.

### 2.2.8.8 Field Point Location

Select the appropriate checkbox  depending on where you want the point located on the entity.



#### Note

You must select at least one option in this section.

- At End Point Object Snap
- At Mid Point Object Snap
- At Center Point Object Snap
- At Node Object Snap
- At Quadrant Object Snap
- At insertion Object Snap
- At Apparent Intersection Object Snap

### 2.2.8.9 Attributes

You can enter up to 5 attributes to further define the field point or field points. Each attribute can contain 62 characters of information.



#### Note

The attribute labels are defined under Setup → Settings → page 10.

### 2.2.8.10 Place Points

Click Insert. Points are placed on the objects according to the settings selected.

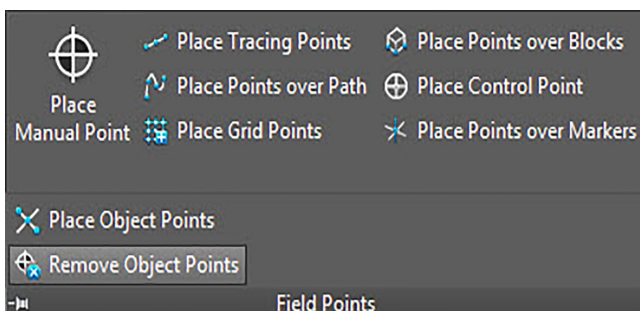


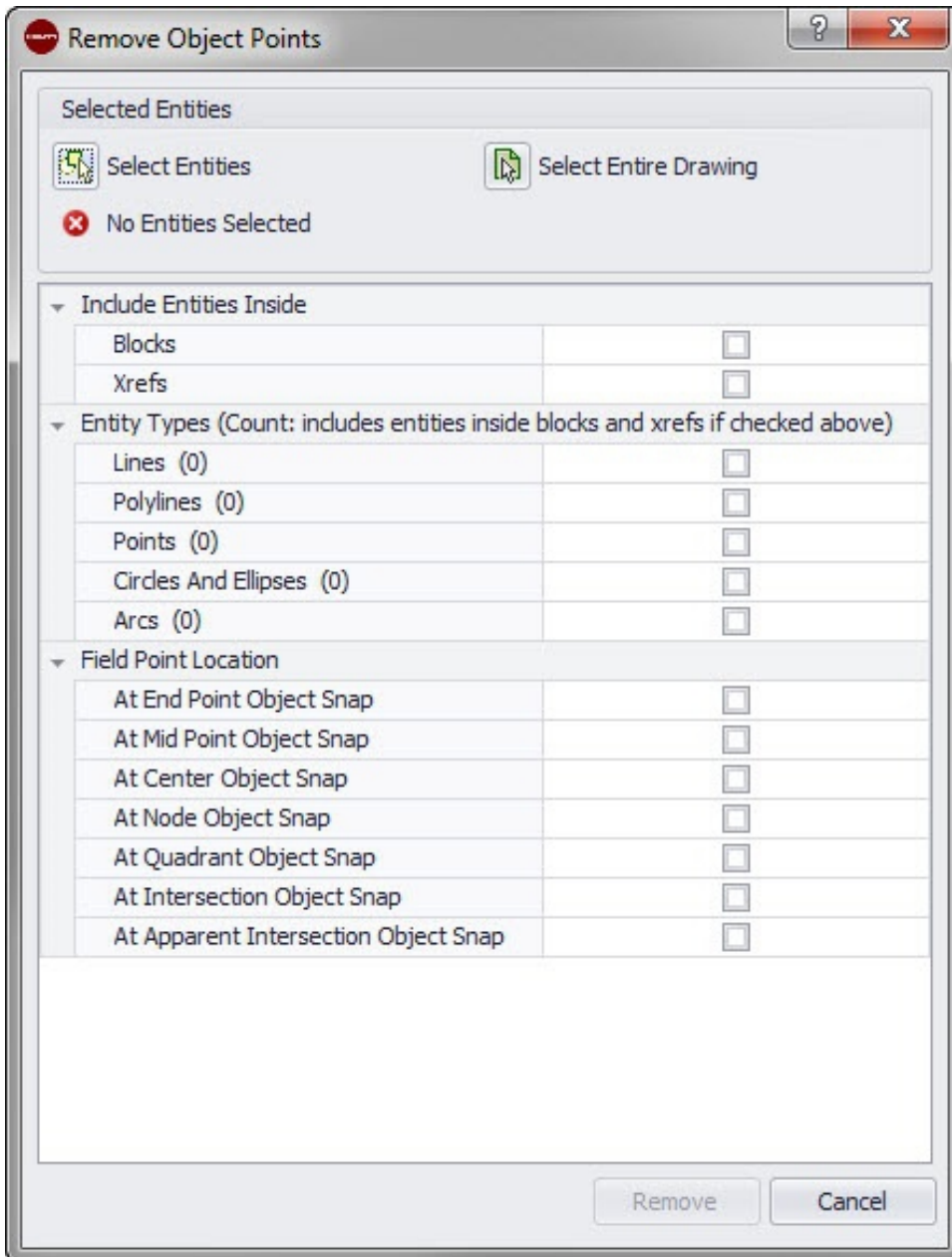
#### Note

The Insert button is not active until you have made selections in the Entity Type and Field Point Location sections.

To quickly remove points set your drawing, refer to the Remove Object Points → page 47 topic below

## 2.2.9 Remove Object Points





You can quickly remove object points using this command. You can select specific entities or the entire drawing.

**Quick Steps: Field Points → Remove Object Points**

1. Go to the Field Points group, click ▼ next to the Field Points group label
2. Click Remove Object Points.
3. In the Selected Entities pane, click one of the following:

**Select Entities**

This option allows you to choose the specific entities for object points. When you have finished selecting the object points you want to remove, press **Enter** on your keyboard. The **Remove Object Points** window re-opens.

**Select Entire Drawing**

Object points will be set for the entire drawing. The entire drawing will be included.

4. Proceed as follows to place points on objects:

**2.2.9.1 Field Point Entity**

The following fields are provided for information purposes only. These fields are not editable.

- Entity Drawing Name

- File Location
- Field Point Loaded in Drawing

### 2.2.9.2 Include Entities Inside

Select the appropriate checkboxes  based on what you want included in the object points.

- Blocks
- Xrefs

### 2.2.9.3 Entity Types

- You must select at least one option in this section.

Select the appropriate checkboxes  based on the entity types you want included:

- **Lines**

This option places object points on selected lines. After the objects have been selected, the number of line entities included in object placement is displayed.

- **Polylines**

This option places object points on polylines. After the objects have been selected, the number of line entities included in object placement is displayed.

- **Points**

This option places object points on points. After the objects have been selected, the number of line entities included in object placement is displayed.

- **Circles and Ellipses**

This option places object points on circles and ellipses. After the objects are selected, the number of line entities included in the object placement is displayed.

- **Arcs**

This option places object points on arcs. After the objects are selected, the number of line entities included in object placement is displayed.

### 2.2.9.4 Field Point Location

Select the appropriate checkbox  depending on where you want the point located on the entity.



#### Note

You must select at least one option in this section.

---

- At End Point Object Snap
- At Mid Point Object Snap
- At Center Point Object Snap
- At Node Object Snap
- At Quadrant Object Snap
- At insertion Object Snap
- At Apparent Intersection Object Snap

### 2.2.9.5 Complete Object point Removal

Click Remove. All selected object points are removed from your drawing.

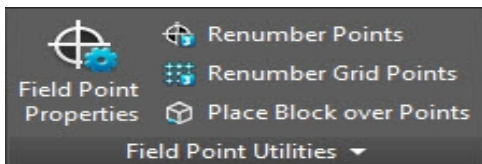


#### Note

The Remove button is not active until you have made selections in the **Entity Type** and Field Point Location sections.

---

## 2.3 Field Point Utilities



The **Field Points Utilities** group provides for viewing and modifying field point properties, renumbering points, and placing blocks over points.

**Quick Steps:** **PROFIS Field Points** → **Field Point Utilities**

On the PROFIS Field Points tab, go to Field Points Utilities. Refer to the topics on the following pages for more information on each utility.

**Field Point Properties** → page 50

This command allows you to view the current properties of a field point or selected set of field points and modify the properties if necessary.

**Renumber Points** → page 53

This command allows you to renumber field points set beforehand. You can set the starting point number, update the prefix and suffix, and include field points exported beforehand in the renumbering process.

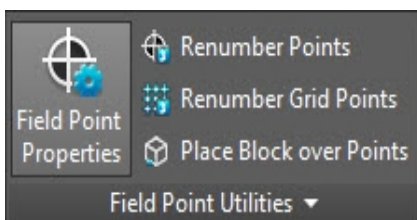
**Renumber Grid Points** → page 55

This command allows you to renumber grid points. You can renumber based on the selected number pattern, update the prefix and suffix, and include field points exported beforehand in the renumbering process.

**Place Block over Points** → page 56

This command allows you to place a block over field points. You can choose to place the block over selected field points or over the entire drawing.

### 2.3.1 Field Point Properties



The **Field Point Properties** command allows you to review the properties for field points that you set beforehand in your drawing.

**Quick Steps:** **Field Point Utilities** → **Field Point Properties**

1. Go to the **Field Point Utilities** group.
2. Click **Field Point Properties**.
3. Select the points in the drawing you want to view properties for and then press  on your keyboard.

**OR**

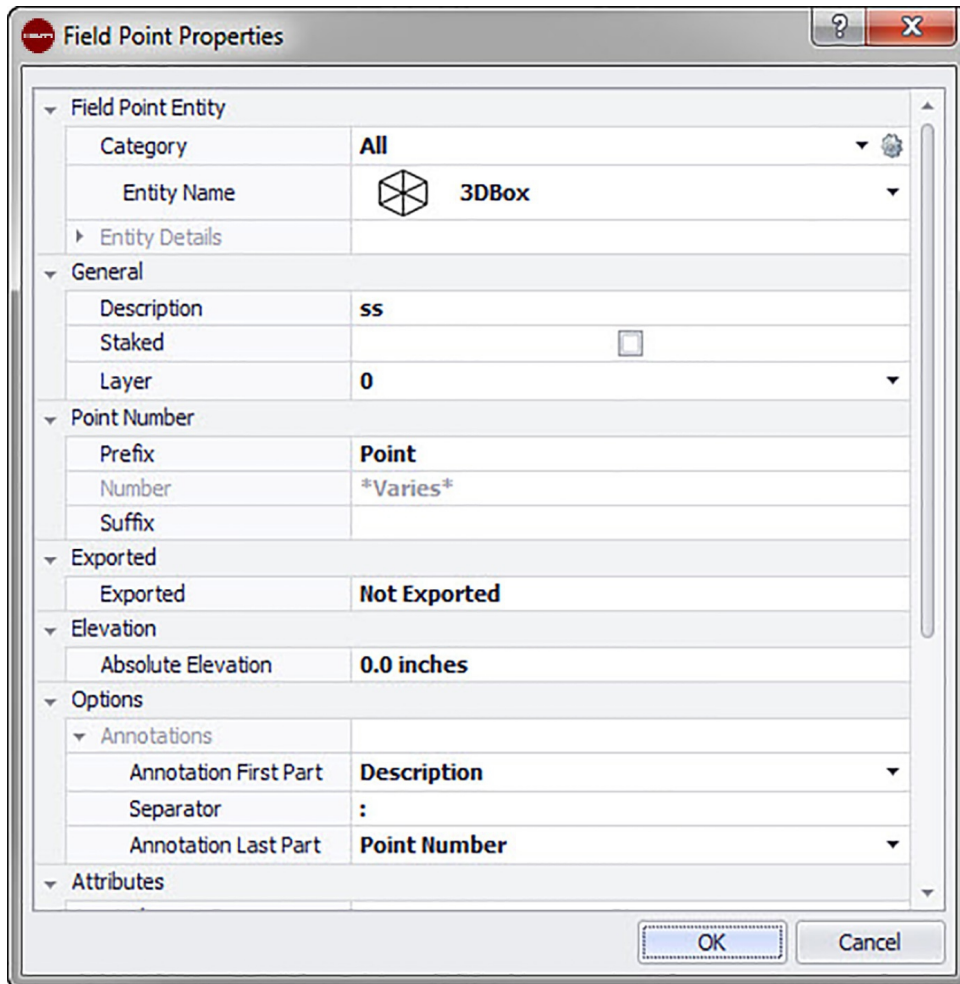
Select points in the drawing and click **Field Point Properties**

The Field Points Properties window opens.




#### Note

To make a multi-point selection, continue selecting all relevant points before pressing  or clicking the Field Points Properties button. For multi-point selection, properties that are not identical display as **\*Varies\***. Keep in mind that you must select the point and not the point annotation!



### 2.3.1.1 Field Point Entity

#### Category

Click ▼ and select the appropriate category from the list. If you want to change the settings, click  next to the Category field. The Field Point Settings → page 8 window opens. This window allows you to change settings/properties of a field point entity before you set the point.

#### Entity Name

Click ▼ and from the list, select the entity name that designates the field point or the set of field points.

#### Entity Details

Click ► to expand the Entity Details pane to view the **Entity Drawing Name**, **File Location**, and the **Loaded in Drawing** information pertaining to the field point.



#### Note

These fields are not editable.

### 2.3.1.2 General

#### Description

This field allows you to enter additional information about the selected field points.

#### Staked

Select the checkbox  if the field point was staked, laid out, or shot in the field.



### Note

This checkbox is activated by default when you check the properties of field points imported from the field so that you can tell that this field point was set.

---

## Layer


Assign this field point to a particular drawing layer by selecting the layer from the list.

### 2.3.1.3 Starting Point Number

#### Prefix

The prefix is a user-defined identifier automatically inserted before the number field (see the next field topic). You can enter up to 6 characters as a prefix.

#### Number

Enter the starting number for this point or set of points. Enter a number between 1 and 999,999,999. If the drawing contains existing points, click  to get the next number (including the matching prefix and suffix) if you wish to continue the same numbering sequence.

#### Suffix

The suffix is a user-defined identifier automatically inserted after the number field (see preceding field topic). You can enter up to 6 characters as a suffix.

---



### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded.

---

### 2.3.1.4 Exports/Elevation

#### Exported

This section is for information purposes only.


- If the **Set Objects As Exported** option is set when you export field points, this property displays the **Exported On** [date and time]. The name of the exported file also appears.
- If the points have not been exported or the option is not selected, this field shows **Not Exported**.

#### Elevation

This property allows you to define the distance (in inches/millimeters, depending on your settings) for the elevation of a point.

#### Options

##### Annotations

This property is a default content setting for the tag prefix. Click  and select **Point Number** or **Description** from the list.

##### Separator

This setting defines the separator between tag prefix and tag suffix. Examples of visually effective separators are:

- Colon :
  - Period .
  - Dash -
- 



### Note

If none of these characters is specified, you can use a separator of your choice.

---

## Annotation Last Part

This property is a default content setting for the tag suffix. Click ▼ and select **Point Number** or **Description** from the list.

### 2.3.1.5 Attributes

You can enter up to 5 attributes to further define field points. Each attribute can contain 62 characters of information.



#### Note

The attribute labels are created under Setup → Settings → page 10.

---

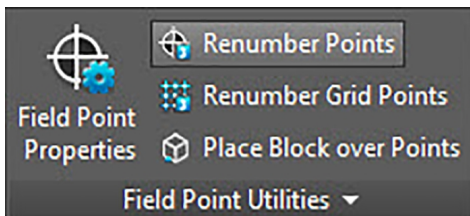
### 2.3.1.6 Attributes Names

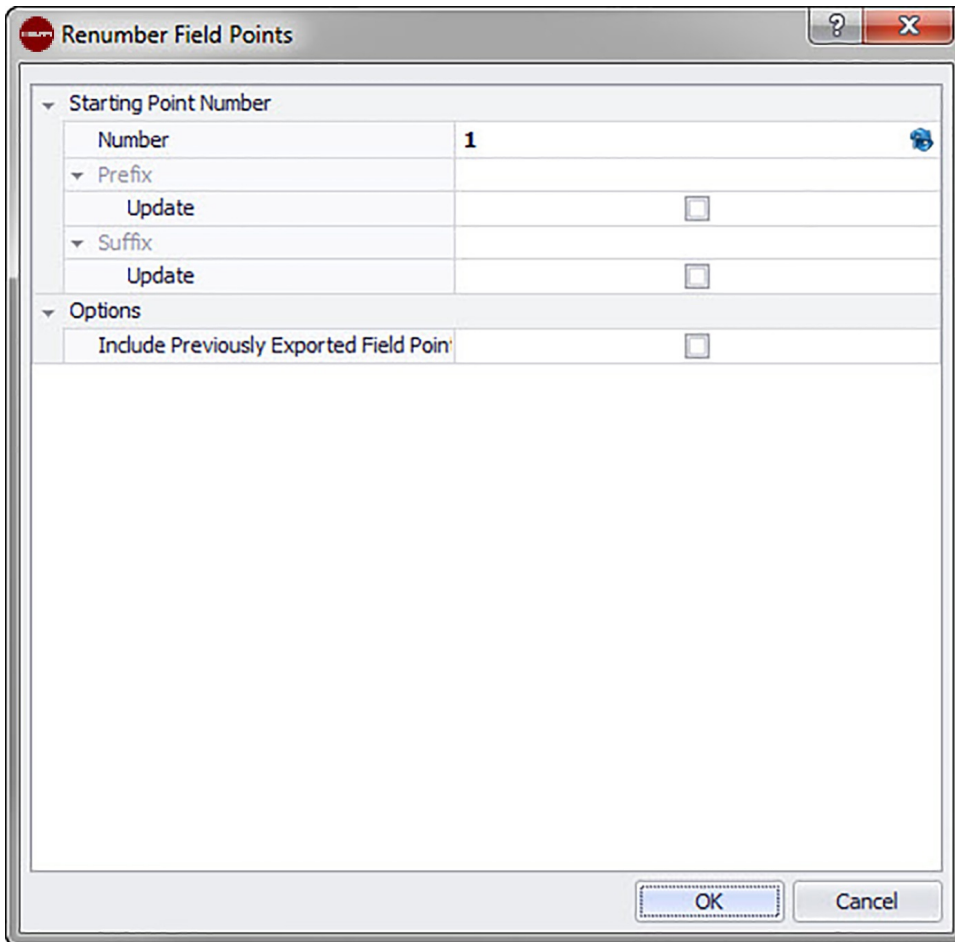
This field displays the default attribute names initially created under Setup → Settings → page 13. You can modify the default names in the **Field Point Properties** window. However, these changes affect only the selected points. The default names are not changed.

### 2.3.1.7 + Complete Field Point Properties

When you have finished working in the **Field Point Properties** window, click OK.

## 2.3.2 Renumber Points






This command allows you to renumber existing field points in your drawing.

**Quick Steps:** **Field Points Utilities** → **Renumber Points**



#### Note

Each point selected is renumbered incrementally based on your input in this field.

If you want to use the next number available, click  next to the field. The field is populated with the next available unused number.

1. Go to the **Field Point Utilities** group and click **Renumber Field Points**.
2. In the Number field, enter the new starting point number.
3. In the Prefix and Suffix sections, you can update the current assignments. Select the checkbox  next to the appropriate Update field. When you select the checkbox, you will also need to enter a value in the **New Prefix** and/or **New Suffix** fields.
4. The Options field allows you to include in renumbering all points exported beforehand. If you want these included, select the checkbox .
5. When all properties are set, click **OK**.
6. Select the points in the drawing you want to renumber. The points are renumbered incrementally based on your selections in the **Renumber Field Points** window. The renumbering information appears on the screen as you click each point.



#### Note

The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded now or in the future.





## Note

You can place one or more points, change your settings, and then continue to place additional points without ending the procedure (by pressing **Enter**). To change settings while placing points, use one of the following options:

In the command bar, you can click on the Settings text.

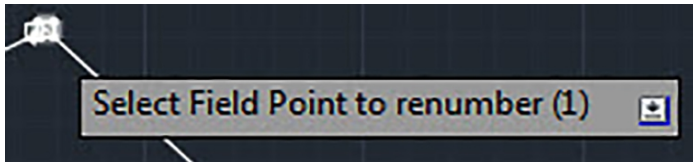
## OR

Click the command bar and then type **S** and press **Enter**.

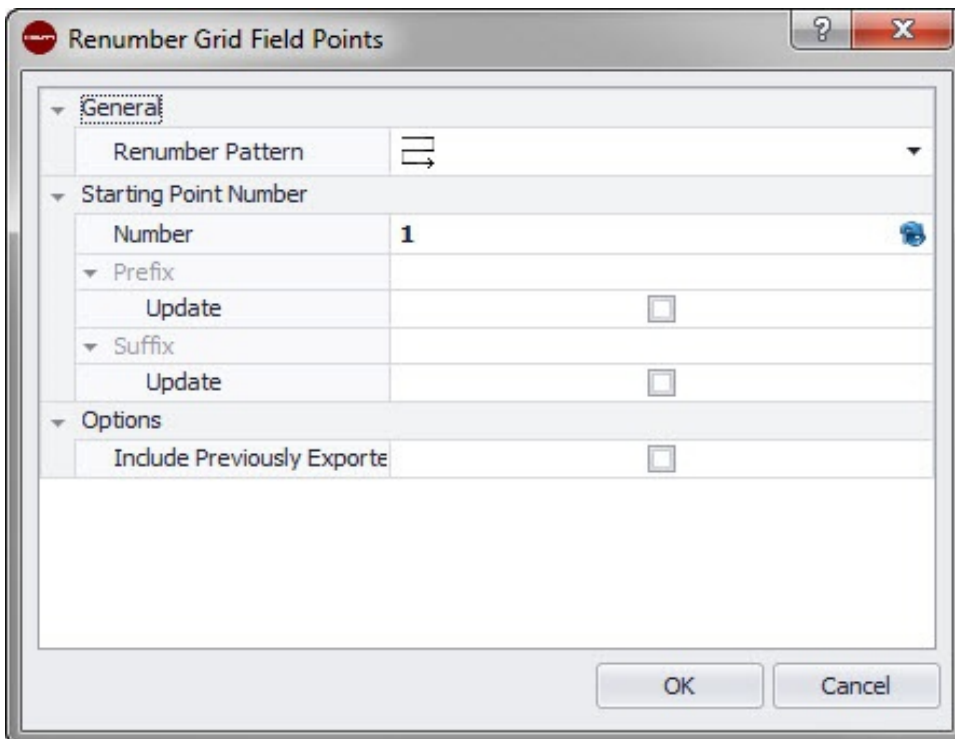
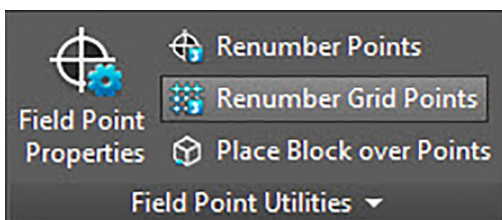
## OR

You can right-click and choose Settings from the pop-up menu.

The Points dialog re-opens. Refer to the instructions above if you want to change settings.



### 2.3.3 Renumber Grid Points



This command allows you to renumber existing grid points in your drawing.

**Quick Steps:** **Field Points Utilities** → **Renumber Grid Points**



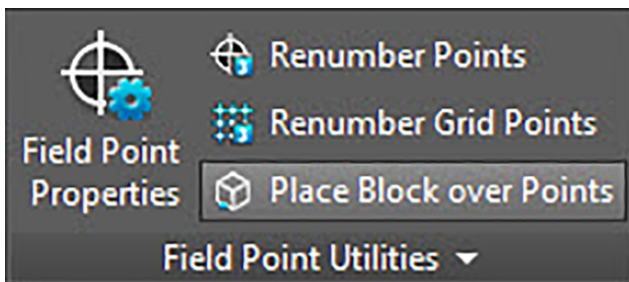
## Note

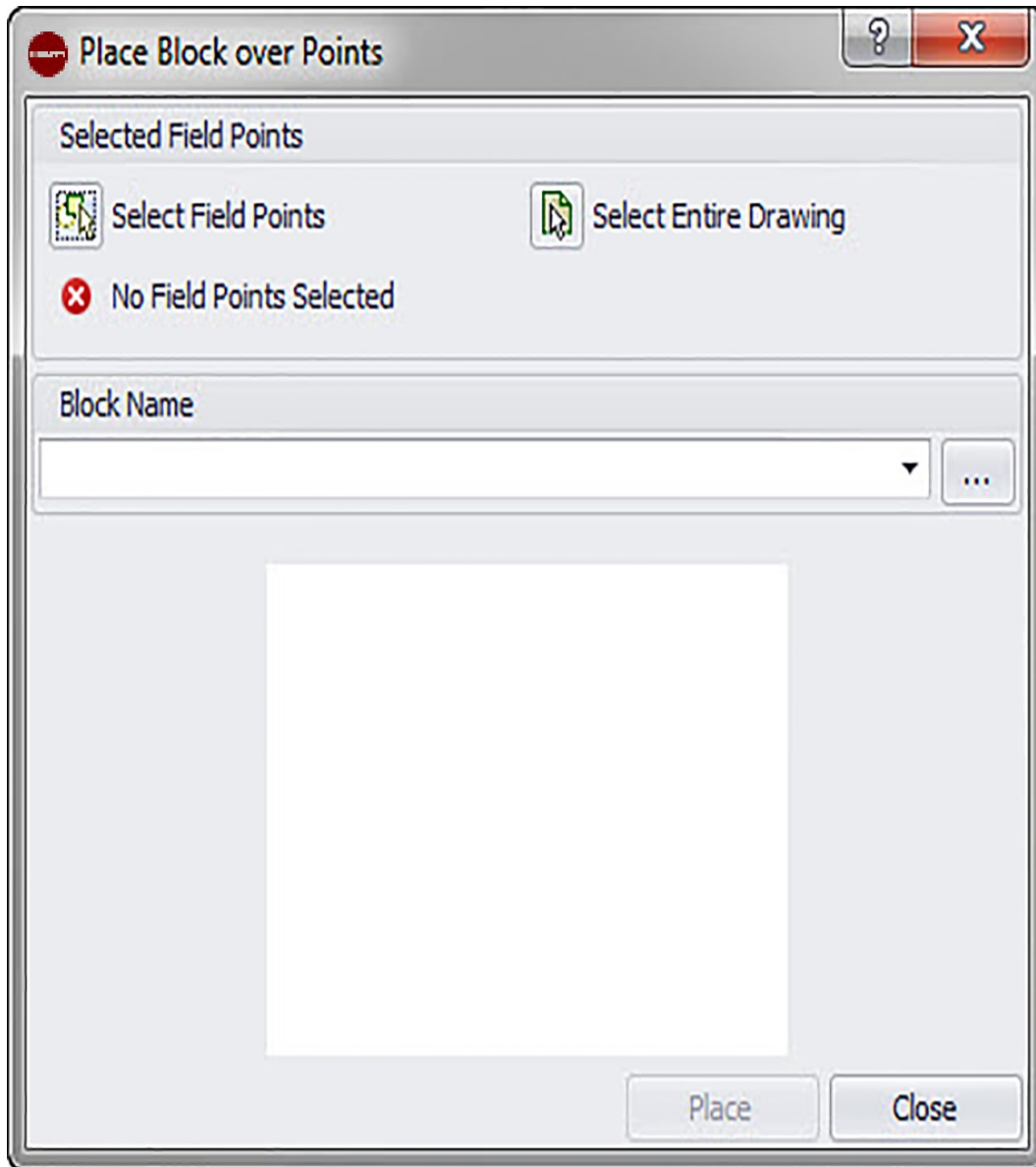
The total number of characters in the prefix-number-suffix combination is 16. **Hilti** recommends limiting the number of characters for each field to ensure that the limit of 16 characters is not exceeded now or in the future.

1. Go to the Field Point Utilities group and click Renumber Grid Points.

2. In the Renumber Pattern field, click ▼ and select a pattern from the list.
3. In the Prefix and Suffix sections, you can update the current assignments. To update the current prefix and/or suffix:  
Select the checkbox  next to the Update field.  
When you select the checkbox, you will also need to enter a value in the **New Prefix** and/or **New Suffix** fields.
4. The **Options** section allows you to include in renumbering all grid points exported beforehand. If you want these included, select the checkbox .
5. When all properties are set, click **OK**.
6. Click the first line of the grid you want to renumber. After you have accepted the grid section, grid points are renumbered. You can accept the selection or remove the grid lines.

#### 2.3.4 Place Blocks over Points





This command allows you to place blocks over points in your drawing.

**Quick Steps: Field Points Utilities → Place Block over Points**

1. Go to the Field Point Utilities group and click one of the following:

**Select Field Points**

This option allows you to choose the specific field points for placing the block. When you have finished selecting the points for your block, press **Enter** on your keyboard. The Place Block over Points window re-opens.

**Select Entire Drawing**

This option will select all points within your drawing for placement of the block.

2. In the Block Name field, click ▼ to select the block you want to place. You can also click ... to navigate to the drawing or the block you want to insert.
3. Click **Place**.
4. Click Close when you have finished.

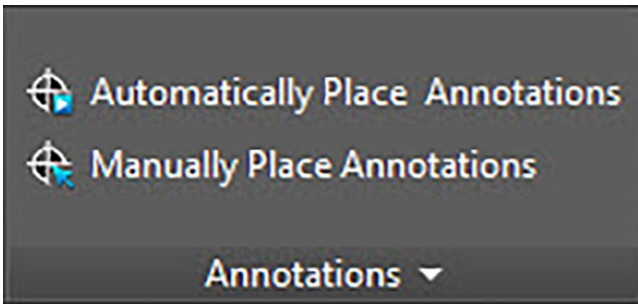


**Note**

You can repeat the above steps to place additional blocks before proceeding to the next step (which completes placement).

---

## 2.4 Annotations



The **Annotations** group provides commands for placing annotations and changing the annotation settings.

**Quick Steps:** **PROFIS Field Points** → **Annotations**

On the PROFIS Field Points tab, go to **Annotations**. Refer to the following pages for more information on each utility.

**Automatically Place Annotations** → page 58

This command allows you to add annotations automatically to field points. The annotations are created and placed in accordance with the settings in Setup → Settings → page 10.

**Manually Place Annotations** → page 59

This command allows you to add annotations manually to field points. The annotations are based on your selected insertion point(s).

**Refresh Point Annotations** → page 59

When annotations are modified outside the PROFIS Field Point software application, you can use this command to refresh annotation text to reflect the correct PROFIS Field Point annotation settings.

**Apply Point Annotation Settings** → page 60

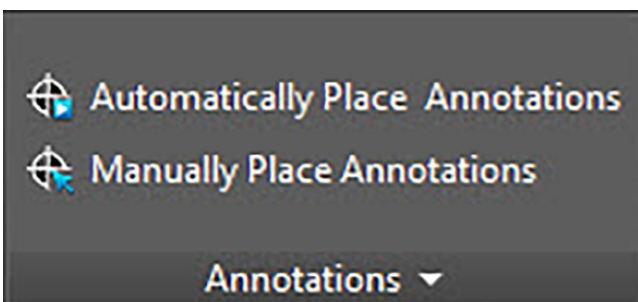
This command allows you to apply annotation settings to annotations associated with selected field points. The same applies to the properties of field points. If you have changed the default settings in Setup → Settings → page 10, use this command to apply the new settings to existing annotations and field points.



### Note

This command applies to settings in the General → page 13 section of the Annotations → page 10 tab. It does not apply to changes made in the Placement → page 10 section.

### 2.4.1 Automatically Place Annotations



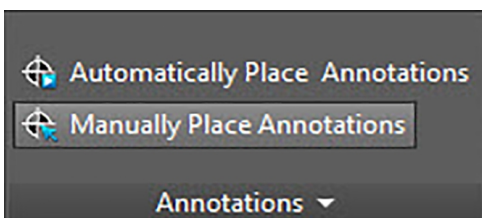
This command allows you to add annotations automatically to field points. The annotations are created and placed in accordance with the settings in Setup → Settings → page 10.

**Quick Steps:** **Annotations** → **Automatically Place Annotations**

1. Go to the **Annotations** group.

2. Click **Automatically Place Annotations**
3. Select the field points in a drawing where you want to automatically place an annotation.
4. When you have finished selecting points, press **[Enter]** on your keyboard.  
The annotation is placed for each field point you selected. The settings created under Setup → Settings → page 10 apply.  
Changing settings applies only to new points placed. If you placed points before your made your changes to the settings, instead of being updated automatically these annotation settings remain as they were at the time of placement.
5. To continue automatically placing annotations, repeat steps 2 and 3.
6. When you have finished automatically placing point annotations, press **[ESC]** on your keyboard.

## 2.4.2 Manually Place Annotations



This command allows you to add annotations manually to field points. The annotations are based on your selected insertion point(s).

### Quick Steps: Annotations → Manually Place Annotations

1. Go to the Annotations group and click Manually Place Annotations.
2. Click the field point on the drawing where you want to place the annotation. The annotation appears on the screen.
3. Move the annotation to the insertion point of your choice (within the point) and right-click. The annotation is placed at the insertion point you selected. The settings created under Setup → Settings → page 10 apply for rotation.  
Changes

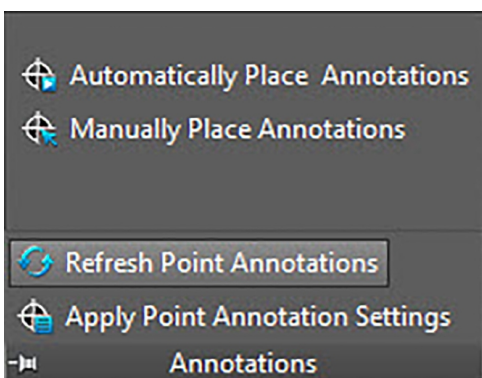


### Note

Changing settings applies only to new points placed. If you placed points before your made your changes to the settings, instead of being updated automatically these annotation settings remain as they were at the time of placement.

- Repeat steps 2 and 3 to continue manually placing annotations on other field points.
- When you have finished placing annotations, press **[ESC]** on your keyboard.

## 2.4.3 Refresh Point Annotations

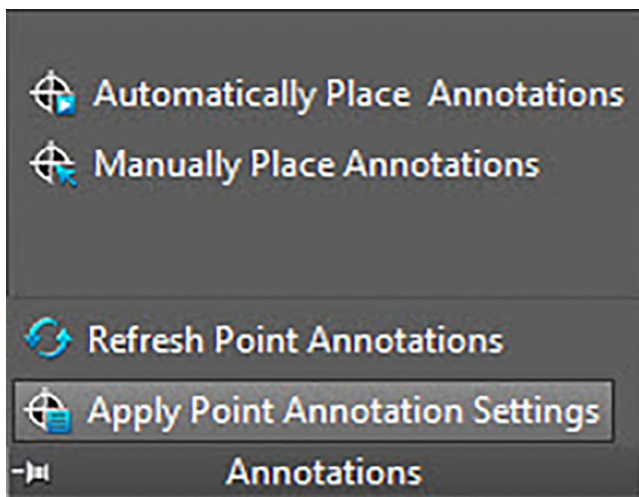


When annotations are modified outside the PROFIS Field Point software application, you can use this command to refresh annotation text to reflect the correct PROFIS Field Point annotation settings.

**Quick Steps: Annotations → Refresh Point Annotations**

1. Go to the Annotations group and click Refresh Point Annotations.
2. Select field points on the drawings where annotations need to be refreshed. The command bar shows a count of the number of field point annotations found to have been modified outside PROFIS Field Points.
3. When you have finished selecting points, press **Enter** on your keyboard. The annotations are updated to reflect the current setting for each particular point in the PROFIS Field Points program.

#### 2.4.4 Apply Point Annotation Settings



This command allows you to apply annotation settings to annotations associated with selected field points. The same applies to the properties of field points. If you have changed the default settings in Setup → Settings → page 10, use this command to apply the new settings to existing annotations and field points.



**Note**

This command applies to settings in the General → page 10 section of the Annotations → page 10 tab. It does not apply to changes made in the Placement → page 10 section.

**Quick Steps: Annotations → Apply Point Annotation Settings**

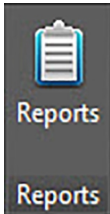
1. Go to the **Annotations** group.
2. Click Apply Point Annotation Settings
3. Select the field points on the drawings that you want to apply the new settings to.
4. When you have finished selecting points, press **Enter** on your keyboard.  
The annotation is updated to reflect the new settings modified in the General → page 10 section under **Setup** → **Settings** → page 10.



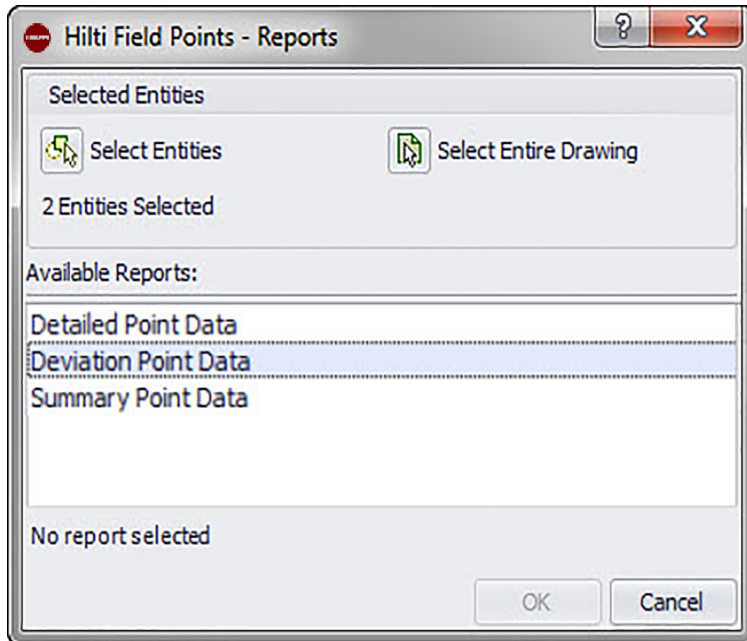
**Note**

Changing settings applies only to new points placed. If you placed points before your made your changes to the settings, instead of being updated automatically these annotation settings remain as they were at the time of placement.

## 2.5 Reports



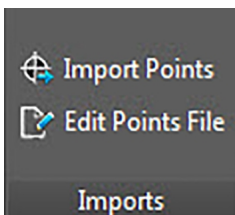
The Reports group provides commands for producing reports



### Quick Steps: PROFIS Field Points → Reports

1. On the PROFIS Field Points tab, click Reports. The **Hilti** Field Link Reports window opens.
2. In the Selected Entities pane, click one of the following:
  - Select Entities**  
This option allows you to choose the specific entities for object points. When you have placed all your points, press **[Enter]** on your keyboard. The Insert Objects window re-opens
  - Select Entire Drawing**  
Object points will be set for the entire drawing. They will be included.
3. In the Available Reports pane, click on the desired report.
4. In the **Report Note** pane, you can enter desired information about the report.
5. Click **OK** to generate the report.

## 2.6 Imports



The Imports group provides commands for importing to and editing field points in your AutoCAD® drawings.

### Quick Steps: PROFIS Field Points → Imports

On the PROFIS Field Points tab, go to **Imports**. Refer to the topics on the following pages for more information on each utility.

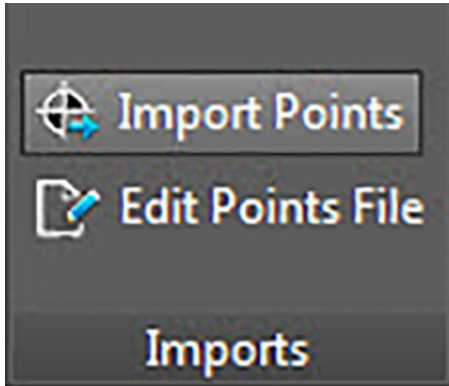
**Import Points** → page 62

This command allows you to import points that were created elsewhere, such as in the field, into your existing drawing.

**Edit Points File** → page 77

This command allows you to modify the import file before importing the points into your drawing.

### 2.6.1 Import Points



This command allows you to import points that were created elsewhere, such as in the field, into your existing drawing. If your drawing contains layers when you import points, the points will be placed on the layer where they were originally exported from.

**Quick Steps:** **PROFIS Field Points** → **Imports**



#### Note

If you are importing from a CSV file → page 63, you must provide additional information before you can continue. Click here → page 63 for more information.

You can sort by date in the grid by clicking the appropriate column heading. An arrow displays in the header to denote ascending or descending sort order.

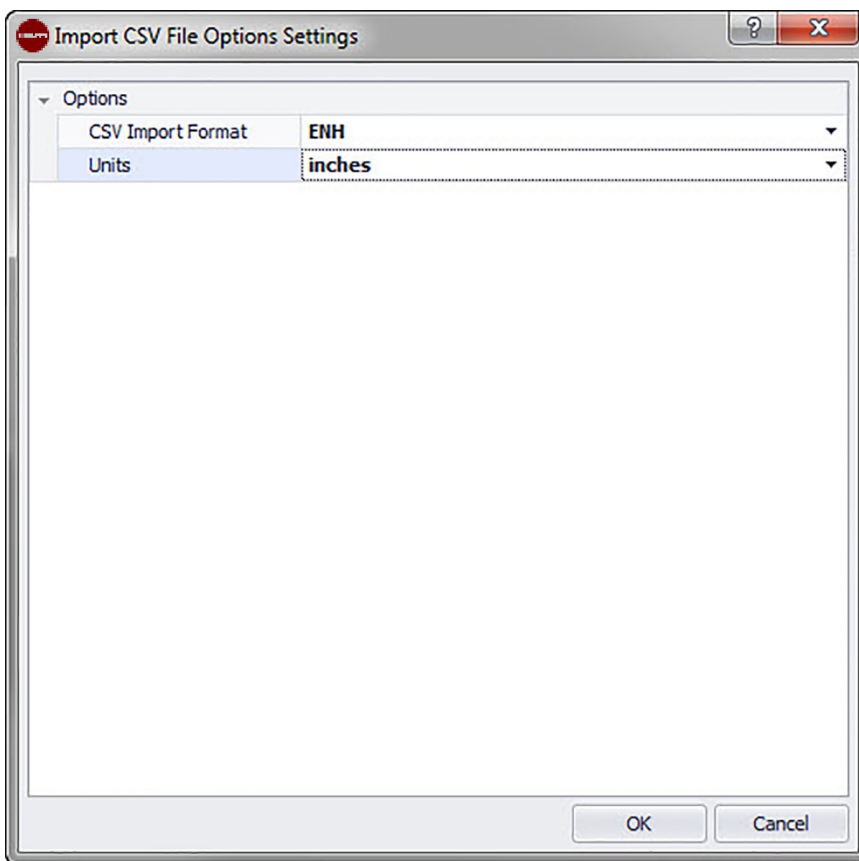
The checkboxes are all selected by default.

1. Go to the Imports group and click **Import Points**. The **Field Point Import** window re-opens.
2. In the Select File To Import field, click **...** to navigate to the location of the import file.
3. Double-click the file.
4. If two or more user coordinate systems (UCS) are available, select the appropriate UCS for your import from the list and click **OK**.
5. The grid shows the field points available in the file for import.
6. Select  or clear  the Include checkbox for each field point based on what you want to do.
7. Click **Continue** to proceed with the import. The Import **Field Points** to Drawing window re-opens.



Include	Point Number	Description	Coordinates	Layer	Staked	Attribute 1	Attribute 2	Attribute 3	Attrib
<input checked="" type="checkbox"/>	C-5		(153.394,-124.520,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-6		(153.549,-124.125,0.000)			Layer A	Attribute	Attribute	LI
<input type="checkbox"/>	C-7		(153.429,-123.850,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-8		(153.944,-124.280,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-9		(135.081,-84.298,0.000)			Layer A	Attribute	Attribute	LI
<input type="checkbox"/>	C-10		(136.074,-85.422,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-11		(136.701,-83.867,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-12		(135.015,-85.356,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-13		(135.577,-84.860,0.000)			STANDARD	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-14		(157.698,-65.318,0.000)			STANDARD	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-15		(135.846,-81.978,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-16		(137.197,-81.326,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-17		(135.870,-80.301,0.000)			Layer A	Attribute	Attribute	LI
<input checked="" type="checkbox"/>	C-18		(136.847,-82.328,0.000)			Layer A	Attribute	Attribute	LI

### 2.6.1.1 Import from CSV

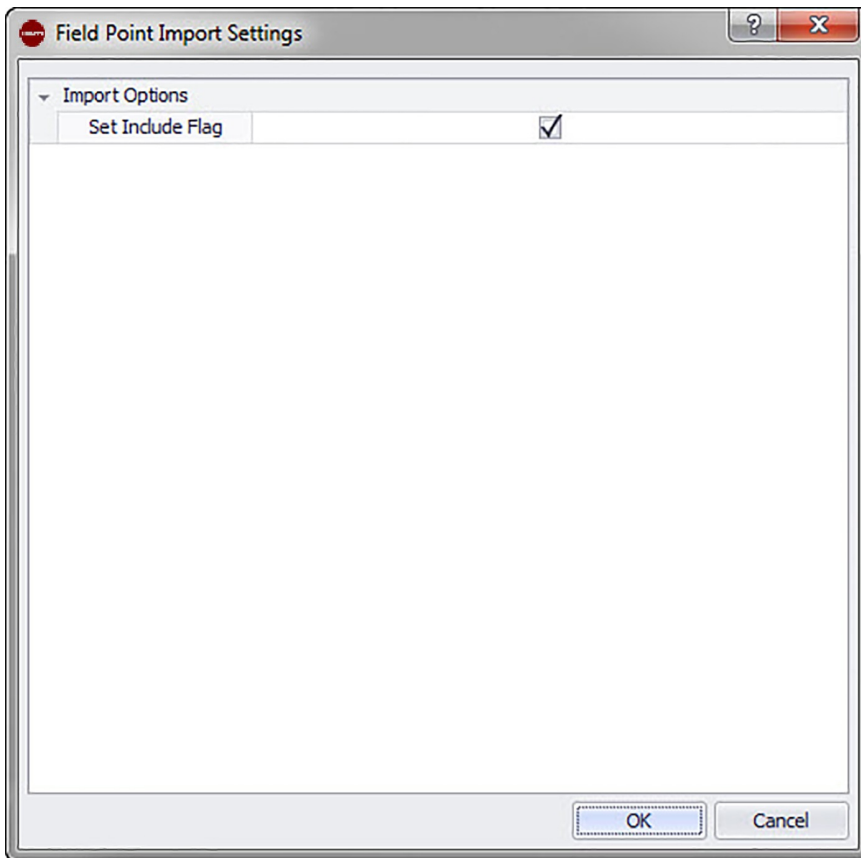


When you select a CSV import file, the PROFIS Field Points program requires additional information to complete the import.

**Quick Steps:** PROFIS Field Points → Imports

1. In the CSV Import Format field, click ▼ and then select the appropriate format from the list.
2. Click ▼ in the Units field and select the appropriate unit of measurement from the list.
3. If two or more user coordinate systems (UCS) are available, select the appropriate UCS for your import.
4. Click **OK**.
5. Click **OK** when you have finished. The Field Point Import → page 62 window opens.
6. To continue your import, refer to the Import Points → page 62 topic (step 3).

## 2.6.1.2 Field Point Import Settings

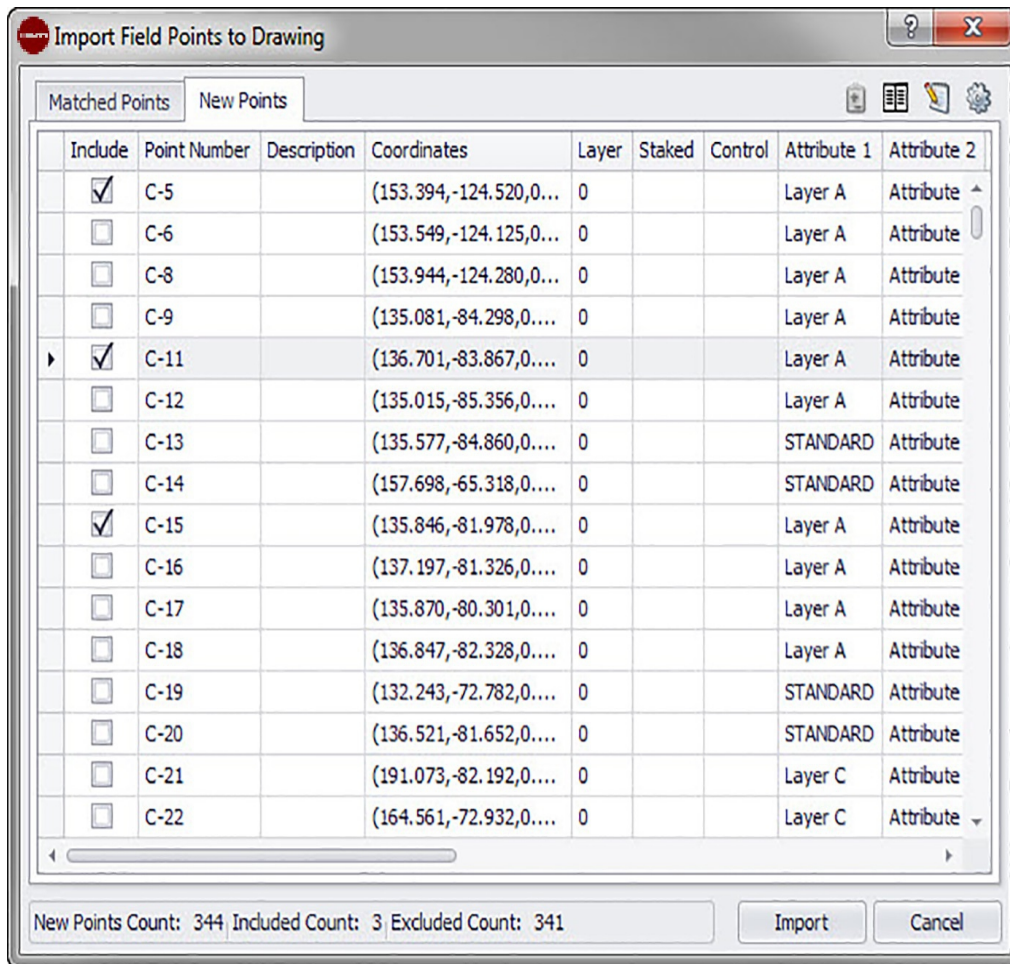


This allows you to select settings on how the points are flagged in the file.

**Quick Steps: Field Point Import** → 

1. In the Import Options pane, select the Set Include Flag checkbox .
2. Click **OK** when you have finished.

## 2.6.2 Import Field Points To Drawing



- When you have completed the steps in the **Field Point Import** window, click **Continue**.

The **Import Field Points to Drawing** window re-opens.

### Quick Steps: Imports → Import Points

The **Import Field Points To Drawing** window organizes the available field points into three tabs:



#### Note

Each grid tab contains its selected field points from the import file. If you want to sort the data in the grid, click the column heading of your choice.

- **Matches**

Contains the points from the import file which, according to an identifier generated by the **PROFIS Field Points** software at the time each point was created, match an existing point in the drawing.



#### Note

If you assigned a manual identifier to the point, this displays also.

- **New points**

Points that are in the import file, but not in the drawing. These do not match an existing point in the drawing

- **Drawing Points**


Points that are in the drawing, but not match a point in the import file.

### 2.6.2.1 Matches

- On the **Matches** tab, select  or clear  the **Include** checkbox next to the appropriate items.





#### Note

Click  to select the settings for the imported field points. Refer to **Settings for field points imported into drawings** for detailed explanations.

---

### 2.6.2.2 New Points

On the **New** tab, select  or clear  the **Include** checkbox next to each appropriate entity.

- Click  to select the settings for the imported field points. Refer to **Settings for field points imported into drawings** for detailed explanations.
- Click  to modify the properties of the new points. There is a detailed explanation on how to change these properties.



#### Note

Carefully review the information in this window.


---

### 2.6.2.3 Complete Import

- Click Import to proceed with the import.



#### Note

To create matches additional to those generated automatically by the software, click . See **Create Additional Matches → page 73** for detailed information. To modify new point properties, refer to the **Modify New Point Properties** topic on subsequent pages.

---

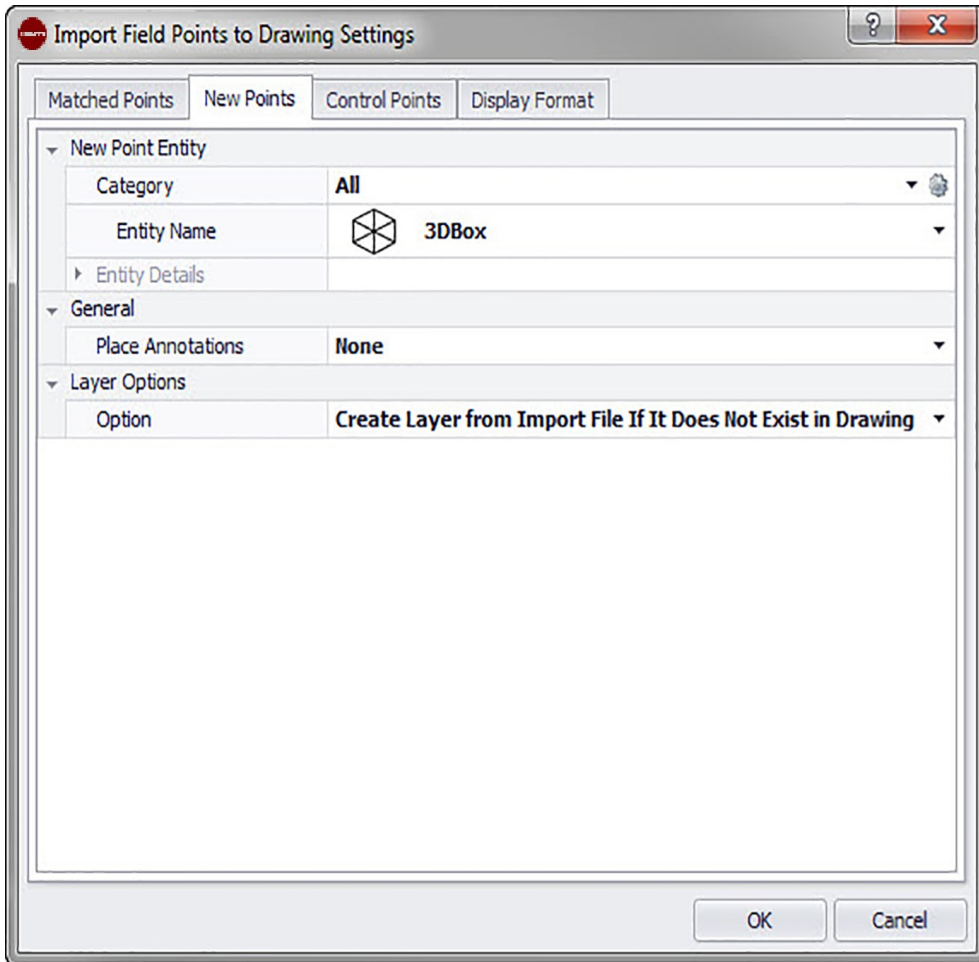
### 2.6.2.4 Import Settings

When you import field points into a drawing, you can create settings and descriptions that define how these new field points appear in the drawings.

**Quick Steps: Import Field Points To Drawing** → 

The **Import Field Points to Drawing Settings** window contains tabs. Depending on the tab you are working on, click the appropriate link below the view detailed information.

## 2.6.2.5 New Points



On the **New Points** tab, you can set the entity name, the default layer, and annotations for the field points to be imported.

### New Point Entity

- **Category**

Click ▼ and select the appropriate category from the list. If you want to change settings, click ⚙ next to the **Category** field. The Field Point Settings → page 15 window opens. This window allows you to change settings/properties of a field point entity before you set the point.

- **Entity Name**

Click ▼ and from the list, select the appropriate **entity name** representing the field point or set of field points.

- **Entity Details**

Click ▶ to expand the **Entity Details** pane to view the **Entity Model Name**, **File Location**, and **Labeled in Model information**.



### Note

These fields are not editable.

### General

- **Place Annotations**

To apply annotations to the point or set of points, click ▼ and select the method by which you want to place annotations.



## Note

Annotations contain tagging information for a point and are initially set up in Setup / Settings → page 10.

## Layer Options

Click ▼ and select the appropriate layer from the list.

### 2.6.2.6 Display Format

Import Field Points to Drawing Settings

Matched Points | New Points | Control Points | Display Format

Length Display Format

Decimal Display Only

Decimal Digits To Display 0.000

Description Format

Field selection and order determine the 'Description Format' for matched points. This applies to screens where you can view existing matches or create new ones.

- Point Number
- Description
- Coordinates
- Layer
- Staked
- Attribute 1
- Attribute 2
- Attribute 3
- Attribute 4
- Attribute 5

Description Format: Point Number, Description, Coordinates, Layer, Staked, Attribute 1, Attribute 2, Attribute 3, Attribute 4, Attribute 5

OK Cancel

The field selection and sequence determine the description format for matched points. This sequence applies to windows in which you can view existing matches or create new matches.



## Note

You can change the sequence within a column by clicking an entity and then clicking or to move it up or down.

The selected columns and sequence are shown at the bottom of the window.

1. On the Description Format tab, select the checkboxes  you want to display in all import window columns.

**OR**

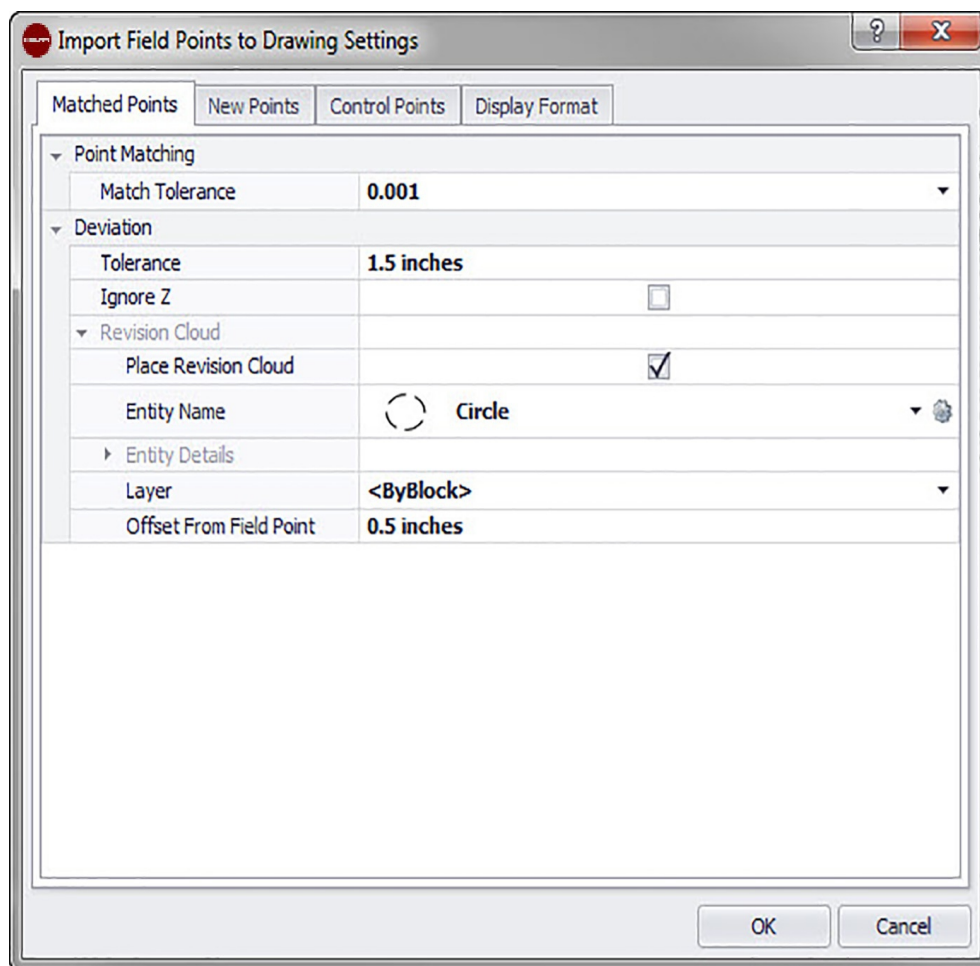
Clear the checkboxes  for the entities you do not wish to display.

2. When you have finished, click **OK** to save your changes.

- Point Number
- Description
- Coordinates
- Layer
- Staked
- Attribute 1
- Attribute 2
- Attribute 3
- Attribute 4
- Attribute 5

**Description Format:** Point Number, Description, Coordinates, Layer, Staked, Attribute 1, Attribute 2, Attribute 3, Attribute 4, Attribute 5

### 2.6.2.7 Matched Points



The options on this tab allow you to set tolerance levels for matching points from your model when importing. You can also set **Revision Cloud** options.

#### Point Matching

To set the **Point Match Tolerance**, click ▼ and select a tolerance value from the list.

#### Deviation

In the Deviation pane, set the following:

- To set a deviation **tolerance**, click ▼ and select a value from the list.
- If you want to **Ignore Z**, select the checkbox .


## Revision Cloud

The procedure for making revision cloud settings for imported points is as follows:

1. Select the **Revision Cloud** checkbox .
2. In the Entity Name field, click ▼ and select a cloud option from the list:

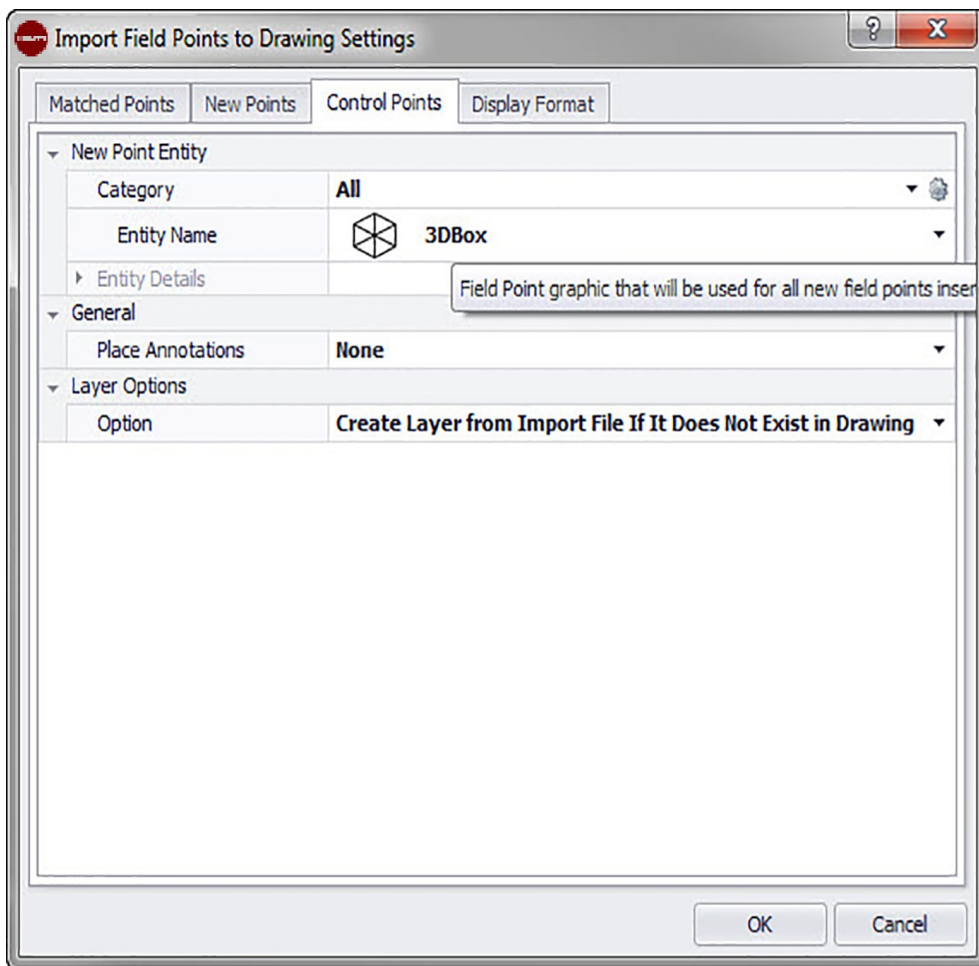


### Note

If the revision cloud shape is not available in the list, you can click  to create additional cloud options → page 18 if necessary. You can also edit existing settings in this window.

The options in the Entity Details pane are not editable in this window. Refer to **Setup** → **Revision Cloud Settings** → page 18 for more information.


## 2.6.2.8 Control Points



Control points are defined by the survey team and are used to coordinate locations on the site or inside of a building. This tab allows you to control how these points are treated when points are imported.

## 2.6.2.9 Field Point Entity

### Category

Click ▼ and select the appropriate category from the list. If you want to change settings, click  next to the **Category** field. The Field Point Settings → page 15 window opens. This window allows you to change settings/properties of a field point entity before you set the point.

### Entity Name



Click ▼ and from the list, select the entity name representing the field point or set of field points.

### Entity Details

Click ► to expand the **Entity Details** pane to view the **Entity Drawing Name**, **File Location** and the **Loaded in Drawing** information pertaining to the field point.



#### Note

These fields are not editable.

---

### 2.6.2.10 General/Layer Options

#### Place Annotations

To apply annotations to the set of points, click ▼ and select the method by which you want to place annotations.



#### Note

Annotations contain tagging information for a point and are initially set up in Setup → Settings → page 10.

---

#### Layer Options

Click ▼ and select the appropriate layer option from the list.

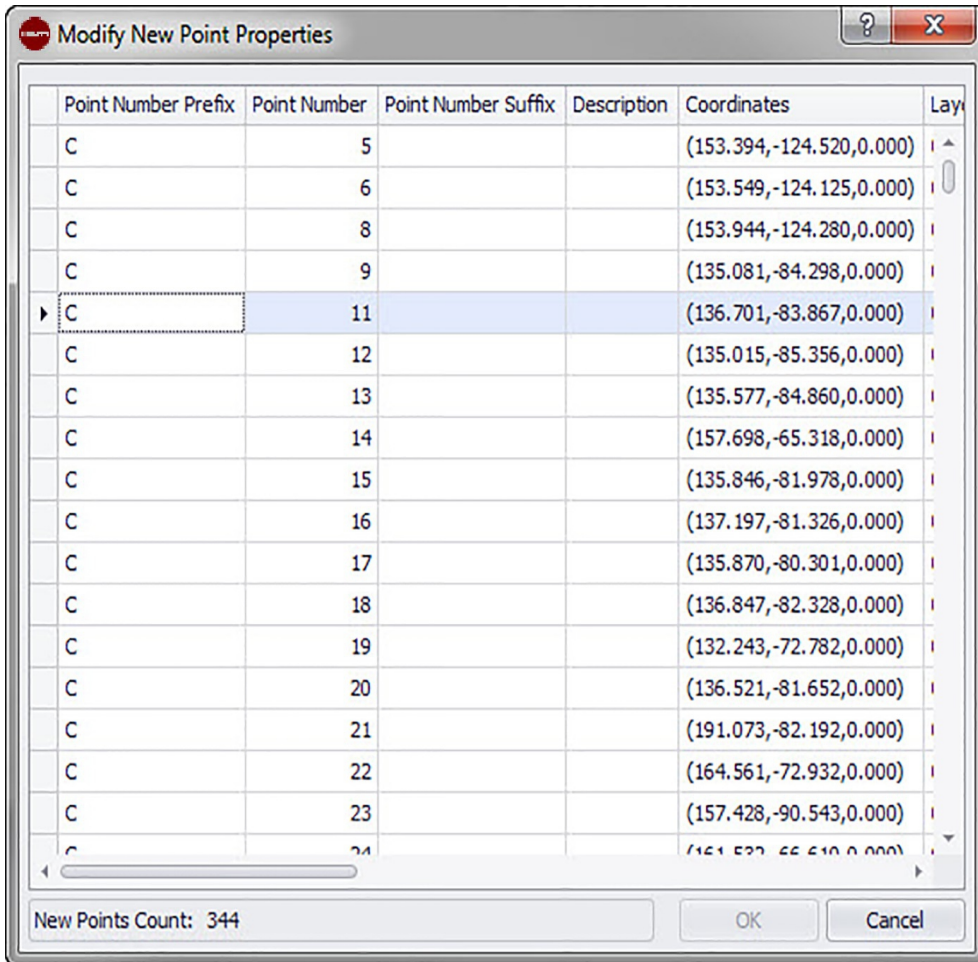
### 2.6.2.11 Completion

- Click **OK** when you have finished.

**OR**

Click another tab within the window to continue creating settings for imported points.

## 2.6.2.12 Modify New Point Properties



When you import field points into a drawing, you can modify the properties of new points in this window.

**Quick Steps:** **Import Field Points To Drawing** →



### Note

The image above shows the default size as the window appears in the PROFIS Field Points software. You will need to resize the window to view all fields.

The grid is populated with the new points from the import file that do not match any existing points in the drawing.



### Note

You can sort the data in the columns by clicking the column heading.

- If you want to change the information for new points, click in the appropriate field and make your changes.

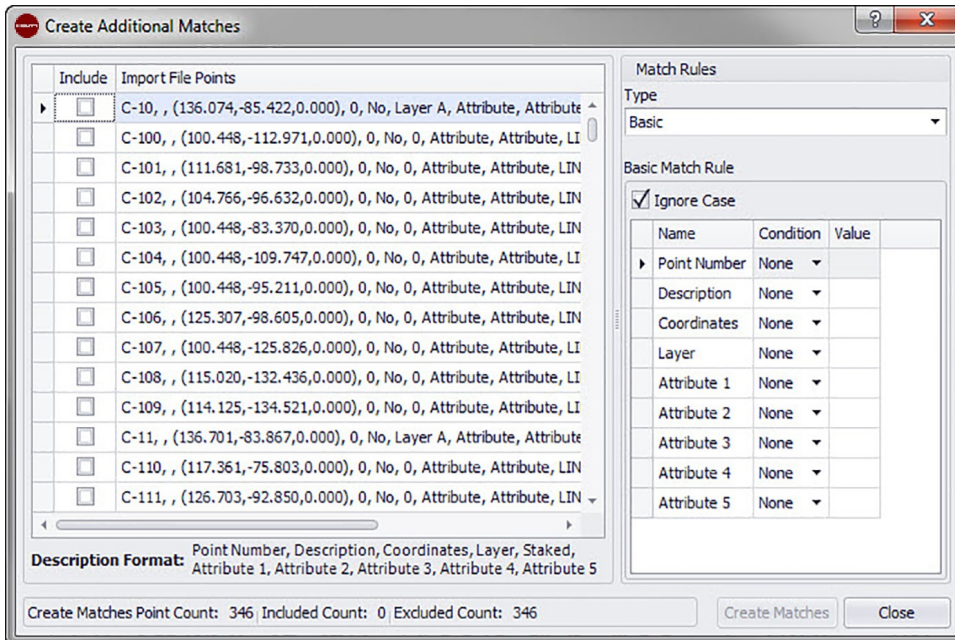


### Note

The **coordinates** and the **Staked** fields are not editable.

- When you have finished, click **OK** to save your changes.

## 2.6.3 Create Additional Matches



When you import field points into a drawing and the points in the drawing do not match the points in the import, you can match the points to the drawing in this window.

1. In the **Match Rules** pane, click ▼ in the **Type** field and select a match rule from the list.
2. Based on your selection in this field, refer to the appropriate topic below for further instructions.

### Basic

In the **Basic Match Rule** pane, select the **Ignore Case** checkbox  if applicable.

#### Next to each entity setting:

Click ▼ in the **Condition** field and select an option from the list. See the **Basic Match Options** topic for a detailed explanation of each condition type.

If you have selected a type requiring a **Value**, enter this value in the **Condition** field.

When you have entered the required information for a match rule, press **Enter** on your keyboard. The operation is performed. Items in the Include column are selected  if they meet the selected criteria.



### Note

You can continue to create matches until all available points are matched.

### Custom

In the **Custom Match Rule** pane, click ▼ to select a rule name from the list.

#### OR

Click ... to create a new rule.

For more information on this procedure refer to:

### Manage Custom Match Rules

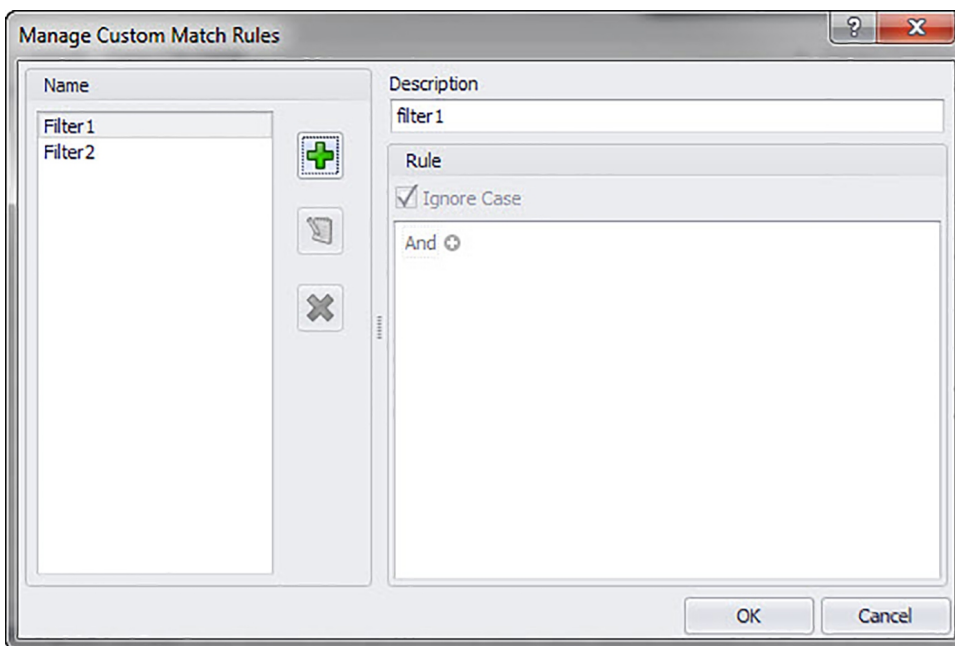
1. Click **OK** when you have finished setting additional matches.

### 2.6.3.1 Basic Match Options

When you select Basic as your Type in Match Rules, you have the following options in the Condition list. An explanatory definition of each Type is included.

- **None**  
The system will not perform a match on the field name. Nothing is required in the **Value** field.
- **Matches**  
The software looks for an exact match between the field name and the drawing point field name. Nothing is required in the **Value** field.
- **Contains**  
The software looks for a partial match (anywhere) between the import point field name and the drawing point field name. A **Value** is required.
- **Starts With**  
The software looks for a partial match (at the start only) between the import point field name and drawing point field name. A **Value** is required.
- **Ends With**  
The software looks for a partial match (at the end only) between the import point field name and drawing point field name. A **Value** is required.

### 2.6.3.2 Custom Match Rules



When you select the Custom option in **Additional Matches**, you must define the parameters of your match.

**Quick Steps: Import Field Points To Drawing** →

#### **Manage Custom Match Rules Window**

The **Manage Custom Match Rules** window opens when you select **Custom** and then click ... in the **Create Additional Matches** window. You can use various operators for matching purposes. These operators are detailed below. For detailed instructions on creating rules, refer to the Manage Custom Rules topic.

#### **Custom Match Operators**

Custom Match Rules that contain more than one condition use the Groups function.

- A Group consists of a logical operator and a condition.
- Groups are created to map a custom match rule.

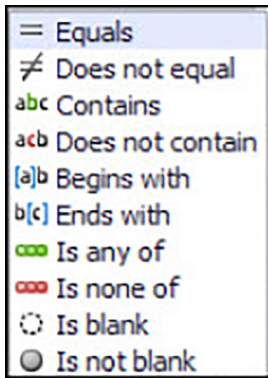
The complete syntax of the custom match rule is displayed at the bottom of the **Manage Custom Match Rules** window.

#### **Logical Operators**

Compares two or more conditions

## Comparison Operators

Compares column data with specific conditional values



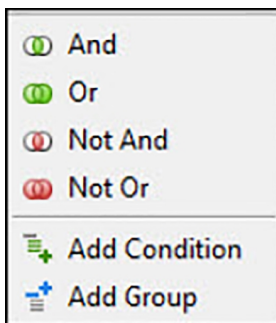
### 2.6.3.3 Manage Custom Match Rules

This topic details how to set up and manage custom match rules

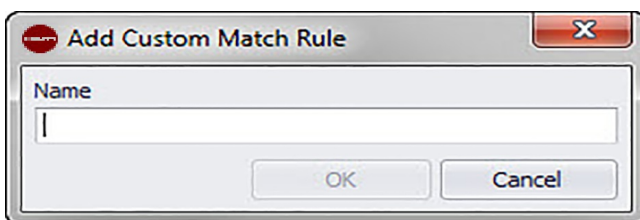



#### Note

The graphic above labels the parts of this window covered in the instructions below. When you open the window, it will not display as in the graphic.



### 2.6.3.4 Add Custom Rule



1. In the **Manage Custom Match Rules** window, click .
2. From the **Add Custom Match Rule** dialog, enter a name for the custom match rule.
3. Click **OK**.  
The name of the rule displays in the left pane of the **Manage Custom Match Rules** window.
4. Highlight the new rule.
5. If you want to add more information about the rule, click the **Description** field and enter the necessary data.
6. As applicable, select  or clear  the **Ignore Case** checkbox.
7. In the Rule pane, begin adding the conditions and parameters for this rule by clicking on the default logical operator **And**.
8. Click **Add Condition** from the pop-up menu.



### Note

The logical operator defaults to **And**. If you want to use some other logical operator, click on **And** to select another operator from the pop-up menu.

1. Click the column name (displayed in blue and enclosed in brackets) **[Attribute 1]**.
2. Select the column name to match on for this condition.



### Note

This defaults to an alphabetical list of columns selected for display.

For example, you can select **Staked** to choose points that have been flagged as already shot or staked in the field.

1. The comparison operator list is dynamic, based on your selection in Column Name.

#### Column Name


For example, if you choose **[Attribute 1]** as your column name, the comparison operator list has different options than when you choose **[Staked]**.

Attribute 1

Staked

1. Click the comparison operator.
2. Select the desired operator from the list.
3. Click **OK**.
4. To add another group condition to this custom match rule, refer to the **Add** → **Modify Group** → **Condition to Custom Match Rule** topic below.

#### 2.6.3.5 Edit Custom Match Rule Name

1. In the **Manage Custom Match Rule** window, highlight the rule in the Name list to edit.
2. Click . The **Edit Custom Rule Name** dialog opens.
3. Modify the **Name**.
4. Click **OK**.



### Note

If you need to change the conditions, refer to the **Add** → **Modify Group** → **Condition to Custom Match Rule** topic below.

#### 2.6.3.6 Add → Modify Group → Condition to Custom Match Rule

1. In the **Manage Custom Match Rule** window, highlight the **Name** of the rule you wish to add a group or condition to.
2. In the Rule pane, click the logical operator you want to add a condition to.
3. Select one of the following options from the pop-up menu  
**Add Condition**  
The condition is added under the logical operator selected. The new conditions are added to the existing custom match rule.  
**Add Group**  
The condition is added under the logical operator selected. The condition is added to the existing custom match rule.
4. Review the complete condition displayed at the bottom of the **Manage Custom Match Rules** window to ensure it is exactly how you want it.



## Note

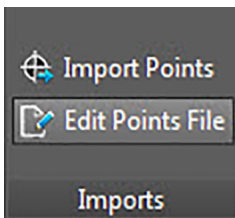
The conditions will be read by the PROFIS Field Points software exactly as written. If your import is not working as expected, you should carefully review the conditions created in this window.

1. Click **OK** to save the custom match rule.

### 2.6.3.7 Delete Custom Match Rule

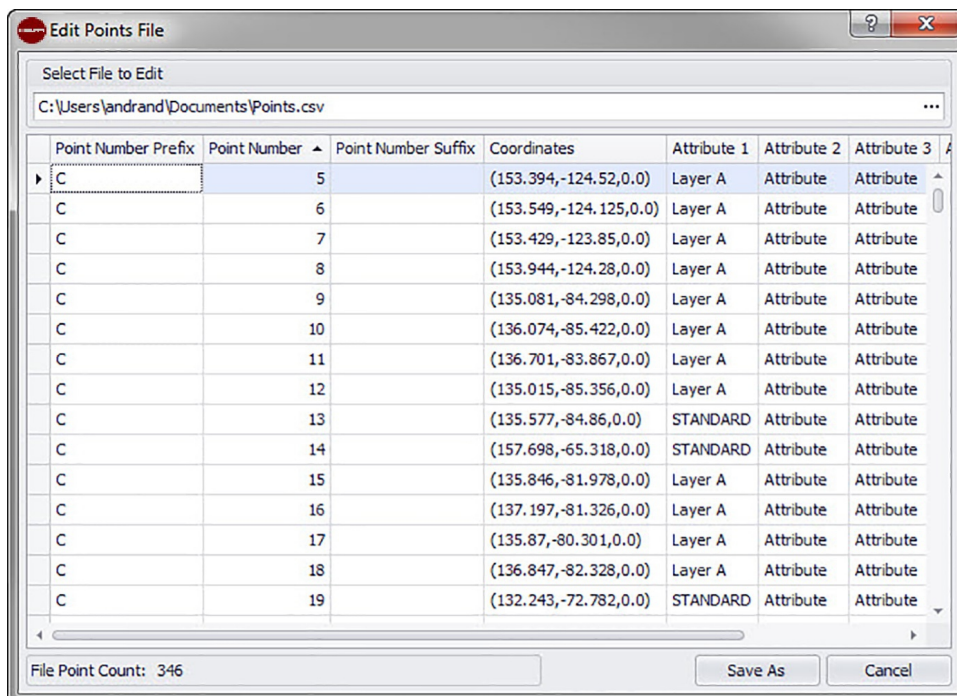
- In the **Manage Custom Rule** window, highlight the name of the rule you want to delete.
- Click
- Click **OK** in the confirmation window.

### 2.6.4 Edit Points File



This command allows you to edit points in an import file.

**Quick Steps:** Imports → Edit Import Points File



1. In the **Select File To Edit** field, click ... .
2. Navigate to the location of the import file.
3. Double-click the file. The field is populated with the path and the file name and the data from the import file appear in the bottom pane of the window.
4. Change the information for the import points as desired.



## Note

The **coordinates** and the **Staked** fields are not editable.

1. When you have finished modifying the new point properties, click **Save As** to save the import file.
2. If you want to keep the original file, save the changed file under a new name.

#### Save File

For example, append a version number to the file name.

1. In the **Save As** dialog, enter a file name.
2. Click **Save**.



#### Note

Do not change the file extension.

Click **OK** in the **Edit Import File** dialog.

## 2.7 Exports



The **Exports** group provides commands for exporting field points for use in other products.

**Quick Steps:** **PROFIS Field Points** → **Exports**

On the **PROFIS Field Points** tab, go to **Exports**. Refer to the topics on the following pages for more information on each utility.

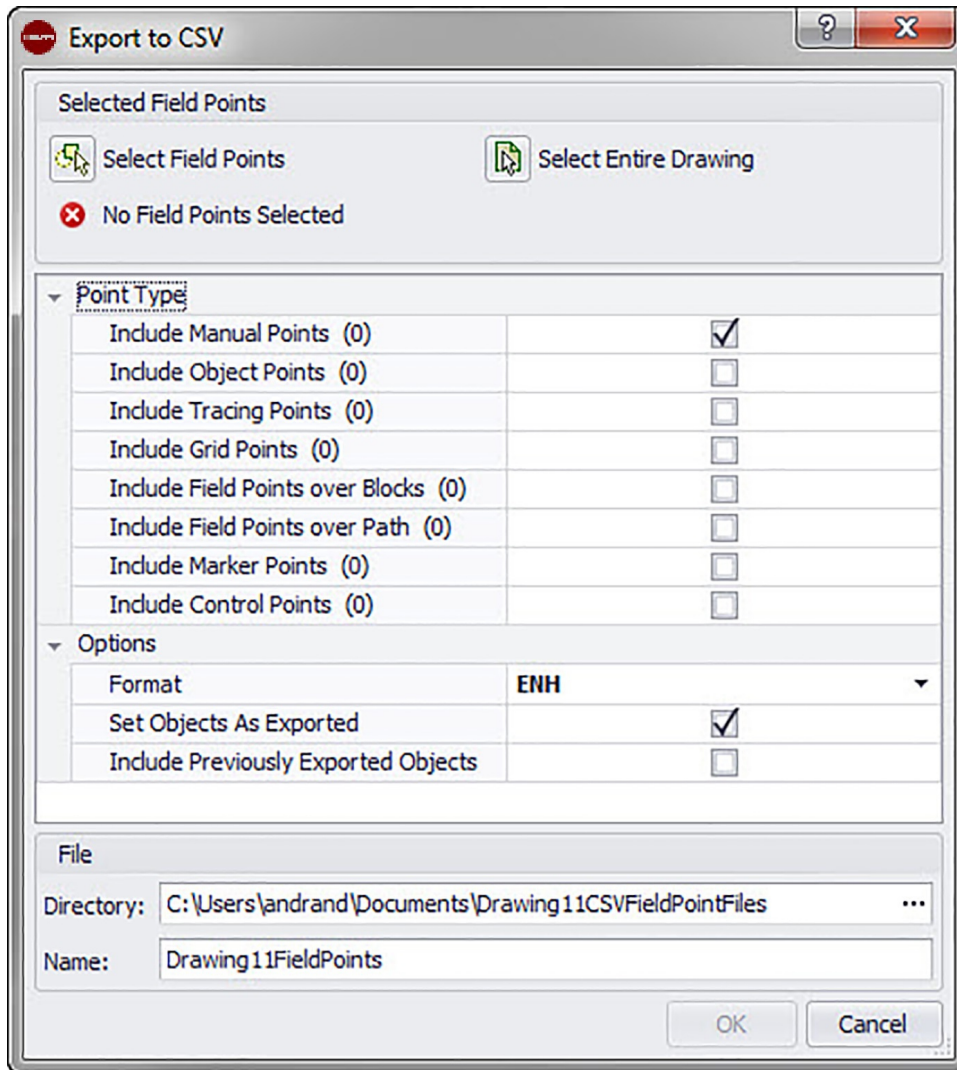
- CSV → page 78

This export function creates a comma-separated file that can be manipulated for import into other programs or opened in Microsoft <sup>®</sup> Excel <sup>®</sup>.

### 2.7.1 CSV







This export function creates a comma-separated file that can be manipulated for import into other programs or opened in Microsoft<sup>®</sup> Excel<sup>®</sup>.

### Quick Steps: Exports → CSV

1. In the selected Field Points pane, click one of the following:

#### Select Field Points

This option allows you to choose the specific entities you want to include in your export file. When you have finished selecting the points you want to place, press **Enter** on your keyboard. The Export to Hilti CSV window re-opens.

2. **Select Entire Drawing**

All points will be exported for the entire drawing. They will be included.

3. In the Point Type pane, select the checkboxes  next to the types you want to include in your export file.

4. In the Options pane, click ▼ next to the Format field and select the format you want to use in your comma-separated values (CSV) file.

5. In the Options pane, select the appropriate checkboxes  next to the following fields:

#### Set Objects As Exported

When you select this checkbox, a flag is set on all objects included in the export.

#### Include Previously Exported Objects

If you want all objects in your drawing included in the export file, regardless of whether they were exported previously, select this checkbox.

#### Coordinates

Select the Use UCS to Export checkbox  if you want to export your points based on a different user coordinate system (UCS), if available.

Choose the appropriate UCS from the list.



### Note

If only one UCS is available, alternatives will not be available in the list

1. In the **File** pane, set the directory path and the file name as desired.

Directory

Defaults to the folder where the file was last saved. A sub-folder is created.

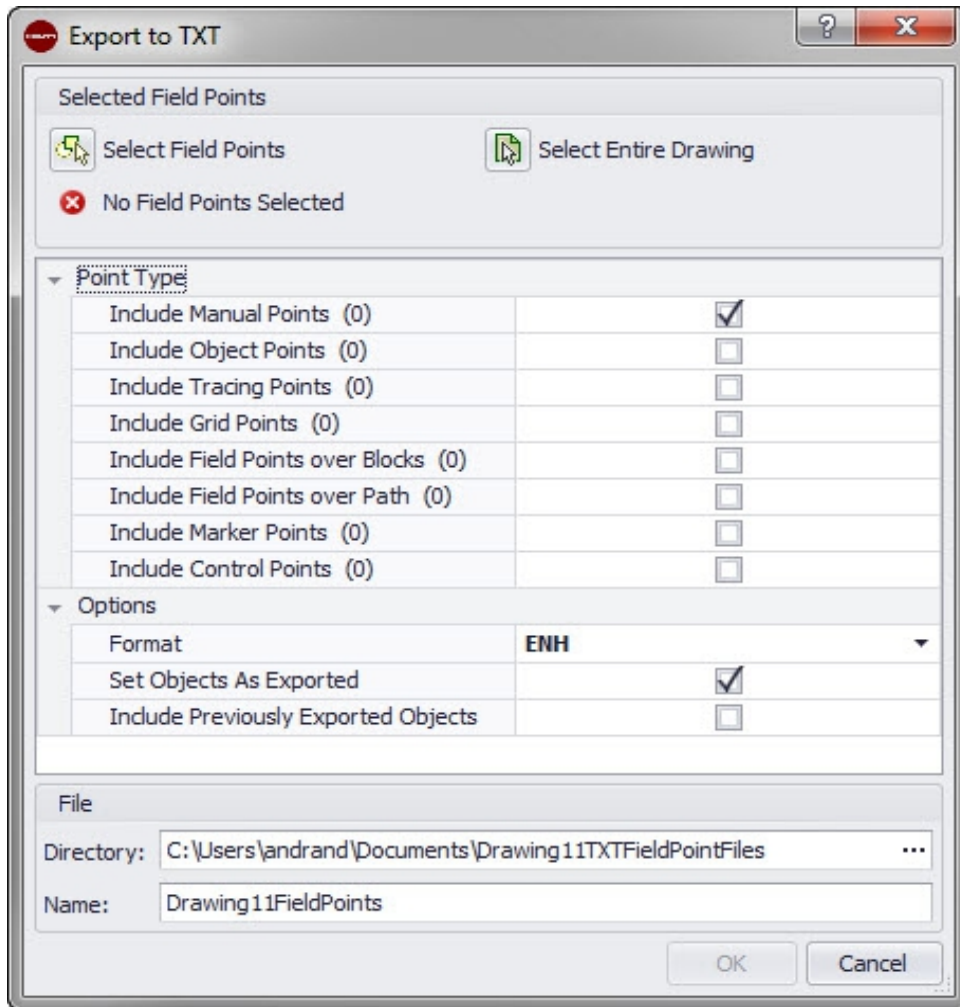
Name

The file name defaults to your [Drawing name]Field Points.

2. Click **OK** when you are ready.
3. When you have completed your export settings, review the export dialog.
4. Click **OK**.

## 2.7.2 TXT





Navigate to the **CSV** button.

Click **TXT**.

Select the field points you want to export.

At the bottom of the window, select the point type you want to add.

Select the location for saving the data.

Click **OK**.

## 2.8 Help

The PROFIS Field Points help system explains how to work with the software application. For each topic there is a brief description of what is available in the various windows, along with instructions for the various tasks.



### Note

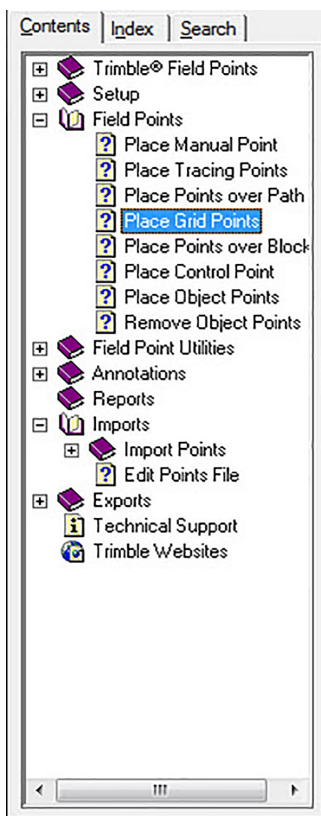
This Help file applies only to PROFIS Field Points commands. When you use native AutoCAD® commands, refer to the help installed with your program.

### Quick Steps: PROFIS Field Points → Help

PROFIS Field Points offers two methods of obtaining help. Click on the appropriate link for more detailed instructions on using each method.

Online Help → page 82

## 2.8.1 Online Help



PROFIS Field Points includes an online help file that walks you through many of the procedures for using the application.

This help function supports numerous options:

- In PROFIS Field Points-specific windows, you can press **F1** on your keyboard to view help for the window you currently have open. The help messages provide you with step-by-step instructions on completing procedures within the window.
- You can scroll through the table of contents to locate the topic containing the procedure you need. The graphic below shows the PROFIS Field Points table of contents.
- You can use the index or search tabs and use keywords to locate the information you need.
- You may see hyperlinks in many of the topics. When you click on a hyperlink, the associated topic displays. It contains additional instructions for completing tasks within the active window





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