Adding Dimension Styles

Template Development Objectives

You will complete the following tasks during this stage of template development:

✓ Add dimension styles.

The next stage of template development involves adding dimension styles to the template. The templates you create in this textbook focus on specific drafting discipline standards and use exact dimension styles. Create additional dimension styles for specific applications.

Mechanical Drafting—Inch Template Dimension Styles

Follow these steps to add dimension styles to the inch-unit mechanical drafting template. The dimension styles are set according to ASME drafting standards and are appropriate for a variety of drawing projects. Create additional dimension styles for specific applications.

1. Open the Mechanical-Inch template file. Remember, you are opening the existing template file using the **OPEN** command, not creating a drawing based on a template file using the **NEW** command.
2. Create a new non-annotative dimension style. Start with the Standard dimension style and apply the style to all dimensions. Change the following settings.
   - Name: Mechanical Inch
   - Dimension line color: ByBlock
   - Dimension line linetype: ByBlock
   - Dimension line lineweight: ByBlock
   - Baseline spacing: .5
   - Do not suppress dimension lines
   - Extension line color: ByBlock
   - Extension line 1 linetype: ByBlock
   - Extension line 2 linetype: ByBlock
   - Extension line lineweight: ByBlock
   - Do not suppress extension lines
   - Extend beyond dimension lines: .125
   - Offset from origin: .063
   - Do not use fixed length extension lines
   - First, second, and leader arrowheads: **Closed filled**

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- Arrow size: .125
- Center marks: **Line**, .0625
- Dimension break size: .125
- Arc length symbol: Preceding dimension text
- Jog angle: 45
- Jog height factor: 1.5
- Text style: Arial
- Text color: ByBlock
- Fill color: **None**
- Text height: .12
- Do not draw a frame around the text
- Vertical and horizontal text placement: **Centered**
- View Direction: **Left-to-right**
- Offset from dim line: 0.063
- Text alignment: **Horizontal**
- Either text or arrows best fit
- Do not suppress arrows
- Place text beside the dimension line
- Use an overall scale of 1.0
- Do not place text manually
- Do not draw dimension line between extension lines
- Linear unit format: **Decimal**
- Linear precision: 0.0000
- Decimal separator: '.'
- Round off: 0.0000
- Do not add a prefix or suffix
- Measurement scale factor: 1.0
- Suppress only the leading linear dimension zero
- Sub-units factor: 0.0
- Do not include a sub-unit suffix
- Angular unit format: **Decimal degrees**
- Angular precision: 0
- Suppress only the leading angular dimension zero
- Do not display alternate units
- Use the **None** tolerance format method

3. Create a new annotative dimension style. Start with the Mechanical Inch dimension style and apply the style to all dimensions. Use most of the same settings applied to the Mechanical Inch dimension style. Change only the following settings.
   - Name: Mechanical Inch Annotative
   - Text style: Arial Annotative
   - Use an annotative scale
4. Set the Mechanical Inch Annotative dimension style current.
5. Delete the Annotative and Standard dimension styles.
6. Resave and close the template file.

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Mechanical Drafting—Metric Template Dimension Styles

Follow these steps to add dimension styles to the metric mechanical drafting template. The dimension styles are set according to ASME drafting standards and are appropriate for a variety of drawing projects. Create additional dimension styles for specific applications.

1. Open the Mechanical-Metric template file. Remember, you are opening the existing template file using the **OPEN** command, not creating a drawing based on a template file using the **NEW** command.
2. Create a new non-annotative dimension style. Start with the Standard dimension style and apply the style to all dimensions. Change the following settings.
   - Name: Mechanical Metric
   - Dimension line color: ByBlock
   - Dimension line linetype: ByBlock
   - Dimension line lineweight: ByBlock
   - Baseline spacing: 12.0
   - Do not suppress dimension lines
   - Extension line color: ByBlock
   - Extension line 1 linetype: ByBlock
   - Extension line 2 linetype: ByBlock
   - Extension line lineweight: ByBlock
   - Do not suppress extension lines
   - Extend beyond dimension lines: 3.0
   - Offset from origin: 1.5
   - Do not use fixed length extension lines
   - First, second, and leader arrowheads: **Closed filled**
   - Arrow size: 3.0
   - Center marks: **Line**, 1.5
   - Dimension break size: 3.0
   - Arc length symbol: Preceding dimension text
   - Jog angle: 45
   - Jog height factor: 1.5
   - Text style: Arial
   - Text color: ByBlock
   - Fill color: **None**
   - Text height: 3.0
   - Do not draw a frame around the text
   - Vertical and horizontal text placement: **Centered**
   - View Direction: **Left-to-right**
   - Offset from dim line: 1.5
   - Text alignment: **Horizontal**
   - Either text or arrows best fit
   - Do not suppress arrows
   - Place text beside the dimension line
   - Use overall scale of 1.0
   - Do not place text manually
   - Do not draw dim line between extension lines
   - Linear unit format: **Decimal**
   - Linear precision: 0.00
   - Decimal separator: '.'

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- Round off: 0.00
- Do not add a prefix or suffix
- Measurement scale factor: 1.0
- Suppress only the trailing linear dimension zero
- Angular unit format: **Decimal degrees**
- Angular precision: 0
- Suppress only the trailing angular dimension zero
- Do not display alternate units
- Use the **None** tolerance format method

3. Create a new annotative dimension style. Start with the Mechanical Metric dimension style and apply the style to all dimensions. Use most of the same settings applied to the Mechanical Metric dimension style. Change only the following settings.
   - Name: Mechanical Metric Annotative
   - Text style: Arial Annotative
   - Use an annotative scale
4. Set the Mechanical Metric Annotative dimension style current.
5. Delete the Annotative and Standard dimension styles.
6. Resave and close the template file.

Architectural Drafting—US Customary Template Dimension Styles

Follow these steps to add dimension styles to the US Customary architectural drafting template. The dimension styles are set according to appropriate drafting standards and are appropriate for a variety of drawing projects. Create additional dimension styles for specific applications.

1. Open the Architectural-US template file. Remember, you are opening the existing template file using the **OPEN** command, not creating a drawing based on a template file using the **NEW** command.
2. Create a new non-annotative dimension style. Start with the Standard dimension style and apply the style to all dimensions. Change the following settings.
   - Name: Architectural US
   - Dimension line color: ByBlock
   - Dimension line linetype: ByBlock
   - Dimension line lineweight: ByBlock
   - Extend beyond ticks: 0"
   - Baseline spacing: 1/2"
   - Do not suppress dimension lines
   - Extension line color: ByBlock
   - Extension line 1 linetype: ByBlock
   - Extension line 2 linetype: ByBlock
   - Extension line lineweight: ByBlock
   - Do not suppress extension lines
   - Extend beyond dimension lines: 1/8"
   - Offset from origin: 1/16"
   - Do not use fixed length extension lines
   - First and second arrowheads: **Architectural tick**
   - Leader arrowheads: **Closed filled**

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- Arrow size: 1/8"
- Center marks: **Line**, 1/16"
- Break size: 1/8"
- Arc length symbol: Preceding dimension text
- Jog angle: 45
- Jog height factor: 1 1/2"
- Text style: SansSerif
- Text color: ByBlock
- Fill color: **None**
- Text height: 1/8"
- Fraction height scale: 1
- Do not draw a frame around the text
- Vertical text placement: **Above**
- Horizontal text placement: **Centered**
- View Direction: **Left-to-right**
- Offset from dim line: 1/16"
- Text alignment: **Aligned with dimension line**
- Either text or arrows best fit
- Do not suppress arrows
- Place text beside the dimension line
- Use overall scale of 1
- Do not place text manually
- Do not draw dim line between extension lines
- Linear unit format: **Architectural**
- Linear precision: 1/16"
- Fraction format: **Horizontal**
- Round off: 0"
- Do not add a prefix or suffix
- Measurement scale factor: 1.0
- Suppress only the **0 feet** zero
- Angular unit format: **Decimal degrees**
- Angular precision: 0
- Suppress only the leading angular dimension zero
- Do not display alternate units
- Use the **None** tolerance format method

3. Create a new annotative dimension style. Start with the Architectural US dimension style and apply the style to all dimensions. Use most of the same settings applied to the Architectural US dimension style. Change only the following settings.
   - Name: Architectural US Annotative
   - Text style: SansSerif Annotative
   - Use an annotative scale
4. Set the Architectural US Annotative dimension style current.
5. Delete the Annotative and Standard dimension styles.
6. Resave and close the template file.

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Architectural Drafting—Metric Template Dimension Styles

Follow these steps to add dimension styles to the metric architectural drafting template. The dimension styles are set according to appropriate drafting standards and are appropriate for a variety of drawing projects. Create additional dimension styles for specific applications.

1. Open the Architectural-Metric template file. Remember, you are opening the existing template file using the **OPEN** command, not creating a drawing based on a template file using the **NEW** command.
2. Create a new non-annotative dimension style. Start with the Standard dimension style and apply the style to all dimensions. Change the following settings.
   - Name: Architectural Metric
   - Dimension line color: ByBlock
   - Dimension line linetype: ByBlock
   - Dimension line lineweight: ByBlock
   - Extend beyond ticks: 0
   - Baseline spacing: 12.0
   - Do not suppress dimension lines
   - Extension line color: ByBlock
   - Extension line 1 linetype: ByBlock
   - Extension line 2 linetype: ByBlock
   - Extension line lineweight: ByBlock
   - Do not suppress extension lines
   - Extend beyond dimension lines: 3.0
   - Offset from origin: 1.5
   - Do not use fixed length extension lines
   - First and second arrowheads: **Architectural tick**
   - Leader arrowheads: **Closed filled**
   - Arrow size: 3.0
   - Center marks: **Line**, 1.5
   - Break size: 3.0
   - Arc length symbol: Preceding dimension text
   - Jog angle: 45
   - Jog height factor: 1.5
   - Text style: SansSerif
   - Text color: ByBlock
   - Fill color: **None**
   - Text height: 3.0
   - Do not draw a frame around the text
   - Vertical text placement: **Above**
   - Horizontal text placement: **Centered**
   - View Direction: **Left-to-right**
   - Offset from dim line: 1.5
   - Text alignment: **Aligned with dimension line**
   - Either text or arrows best fit
   - Do not suppress arrows
   - Place text beside the dimension line
   - Use overall scale of 1
   - Do not place text manually
   - Do not draw dim line between extension lines

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- Linear unit format: **Decimal**
- Linear precision: 0
- Decimal separator: '.'
- Round off: 0
- Do not add a prefix or suffix
- Measurement scale factor: 1.0
- Suppress only the trailing linear dimension zero
- Angular unit format: **Decimal degrees**
- Angular precision: 0
- Suppress only the trailing angular dimension zero
- Do not display alternate units
- Use the **None** tolerance format method

3. Create a new annotative dimension style. Start with the Architectural Metric dimension style and apply the style to all dimensions. Use most of the same settings applied to the Architectural Metric dimension style. Change only the following settings.
   - Name: Architectural Metric Annotative
   - Text style: SansSerif Annotative
   - Use an annotative scale
4. Set the Architectural Metric Annotative dimension style current.
5. Delete the Annotative and Standard dimension styles.
6. Resave and close the template file.

Civil Drafting—US Customary Template Dimension Styles

Follow these steps to add dimension styles to the US Customary civil drafting template. The dimension styles are set according to appropriate drafting standards and are appropriate for a variety of drawing projects. Create additional dimension styles for specific applications.

1. Open the Civil-US template file. Remember, you are opening the existing template file using the **OPEN** command, not creating a drawing based on a template file using the **NEW** command.
2. Create a new non-annotative dimension style. Start with the Standard dimension style and apply the style to all dimensions. Change the following settings.
   - Name: Civil US
   - Dimension line color: ByBlock
   - Dimension line linetype: ByBlock
   - Dimension line lineweight: ByBlock
   - Baseline spacing: 0.5"
   - Do not suppress dimension lines
   - Extension line color: ByBlock
   - Extension line 1 linetype: ByBlock
   - Extension line 2 linetype: ByBlock
   - Extension line lineweight: ByBlock
   - Do not suppress extension lines
   - Extend beyond dimension lines: 0.125"
   - Offset from origin: .0625"
   - Do not use fixed length extension lines
   - First, second, and leader arrowheads: **Closed filled**

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- Arrow size: .125"
- Center marks: **Line**, .0625"
- Break size: .125"
- Arc length symbol: Preceding dimension text
- Jog angle: N 45d0'0" E
- Jog height factor: 1.50"
- Text style: SansSerif
- Text color: ByBlock
- Fill color: **None**
- Text height: .125"
- Do not draw a frame around the text
- Vertical text placement: **Above**
- Horizontal text placement: **Centered**
- View Direction: **Left-to-right**
- Offset from dim line: .0625"
- Text alignment: **Aligned with dimension line**
- Either text or arrows best fit
- Do not suppress arrows
- Place text beside the dimension line
- Use overall scale of 1
- Do not place text manually
- Do not draw dim line between extension lines
- Linear unit format: **Engineering**
- Linear precision: 0'-0.00"
- Round off: 0.00"
- Do not add a prefix or suffix
- Measurement scale factor: 1.0
- Do not suppress linear dimension zeros
- Angular unit format: **Degrees Minutes Seconds**
- Angular precision: 0d00'00"
- Suppress the trailing angular dimension zero
- Do not display alternate units
- Use the **None** tolerance format method

3. Create a new annotative dimension style. Start with the Civil US dimension style and apply the style to all dimensions. Use most of the same settings applied to the Civil US dimension style. Change only the following settings.
   - Name: Civil US Annotative
   - Text style: SansSerif Annotative
   - Use an annotative scale
4. Set the Civil US Annotative dimension style current.
5. Delete the Annotative and Standard dimension styles.
6. Resave and close the template file.

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Civil Drafting—Metric Template Dimension Styles

Follow these steps to add dimension styles to the metric civil drafting template. The dimension styles are set according to appropriate drafting standards and are appropriate for a variety of drawing projects. Create additional dimension styles for specific applications.

1. Open the Civil-Metric template file. Remember, you are opening the existing template file using the **OPEN** command, not creating a drawing based on a template file using the **NEW** command.
2. Create a new non-annotative dimension style according to the following settings.
   - Name: Civil Millimeter
   - Dimension line color: ByBlock
   - Dimension line linetype: ByBlock
   - Dimension line lineweight: ByBlock
   - Baseline spacing: 12.0
   - Do not suppress dimension lines
   - Extension line color: ByBlock
   - Extension line 1 linetype: ByBlock
   - Extension line 2 linetype: ByBlock
   - Extension line lineweight: ByBlock
   - Do not suppress extension lines
   - Extend beyond dimension lines: 3.0
   - Offset from origin: 1.5
   - Do not use fixed length extension lines
   - First, second, and leader arrowheads: **Closed filled**
   - Arrow size: 3
   - Center marks: **Line**, 1.5
   - Break size: 3
   - Arc length symbol: Preceding dimension text
   - Jog angle: 45
   - Jog height factor: 1.5
   - Text style: SansSerif
   - Text color: ByBlock
   - Fill color: **None**
   - Text height: 3.0
   - Do not draw a frame around the text
   - Vertical text placement: **Above**
   - Horizontal text placement: **Centered**
   - View Direction: **Left-to-right**
   - Offset from dim line: 1.5
   - Text alignment: **Aligned with dimension line**
   - Either text or arrows best fit
   - Do not suppress arrows
   - Place text beside the dimension line
   - Use overall scale of 1
   - Do not place text manually
   - Do not draw dim line between extension lines
   - Linear unit format: **Decimal**
   - Linear precision: 0
   - Round off: 0

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- Do not add a prefix or suffix
- Measurement scale factor: 1.0
- Suppress the trailing linear dimension zero
- Angular unit format: **Decimal degrees**
- Angular precision: 0
- Suppress the trailing angular dimension zero
- Do not display alternate units
- Use the **None** tolerance format method

3. Create a new annotative dimension style. Start with the Civil Millimeter dimension style and apply the style to all dimensions. Use most of the same settings applied to the Civil Millimeter dimension style. Change only the following settings.
   - Name: Civil Millimeter Annotative
   - Text style: SansSerif Annotative
   - Use an annotative scale
4. Create a new non-annotative dimension style. Start with the Civil Millimeter dimension style and apply the style to all dimensions. Use most of the same settings applied to the Civil Millimeter dimension style. Change only the following settings.
   - Name: Civil Centimeter
   - Suppress the leading linear dimension zero
   - Sub-units factor: 10
   - Sub-units suffix: mm
5. Create a new annotative dimension style. Start with the Civil Centimeter dimension style and apply the style to all dimensions. Use most of the same settings applied to the Civil Centimeter dimension style. Change only the following settings.
   - Name: Civil Centimeter Annotative
   - Text style: SansSerif Annotative
   - Use an annotative scale
6. Create a new non-annotative dimension style. Start with the Civil Centimeter dimension style and apply the style to all dimensions. Use most of the same settings applied to the Civil Centimeter dimension style. Change only the following settings.
   - Name: Civil Meter
   - Sub-units factor: 100
   - Sub-units suffix: cm
7. Create a new annotative dimension style. Start with the Civil Meter dimension style and apply the style to all dimensions. Use most of the same settings applied to the Civil Meter dimension style. Change only the following settings.
   - Name: Civil Meter Annotative
   - Text style: SansSerif Annotative
   - Use an annotative scale
8. Set the Civil Millimeter Annotative dimension style current.
9. Delete the Annotative and Standard dimension styles.
10. Resave and close the template file.

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