



AUTOCAD



Gráfica_Digital

Este tutorial foi elaborado pela equipe de monitores de DIG de 2015-2

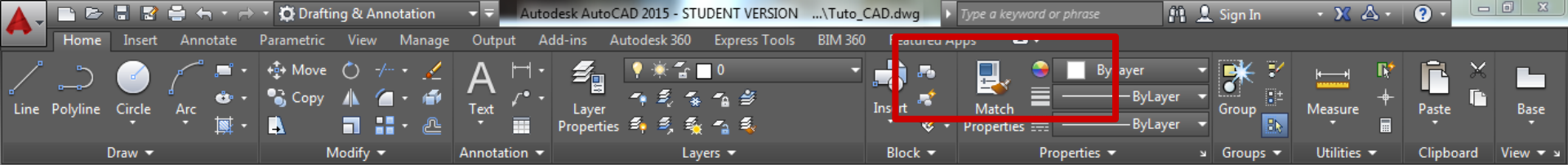
**Aline Loura,
Angélica Villon,
Bia de Assis,
Clara Coura,
Igor Dias,
Melissa Borges,
Pedro de Andrade e
Valéria Fialho**

**Professor coordenador da disciplina
Prof. Dr. Thiago Leitão**

Como configurar os Layers e o Ctb do AutoCAD?

Um conceito importante no desenho arquitetônico é a hierarquia de linhas. Quando desenhávamos na prancheta tínhamos a necessidade de trabalhar com diversas lapiseiras (0.3, 0.5, 0.7,...) e grafites para conseguir diferentes espessuras e contrastes. Da mesma forma, quando desenhamos com a ajuda do AutoCAD, precisamos configurá-lo para manter essa hierarquia.

Através dos Layers podemos escolher cores para as linhas que mais tarde serão associadas a uma espessura na impressão. Nesse tutorial você aprenderá a configurar Layers e o Ctb para plotagem.



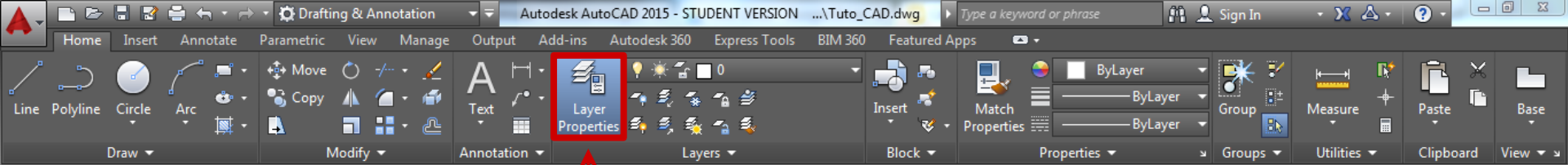
Tuto_CAD*

[-] [Top] [2D Wireframe]

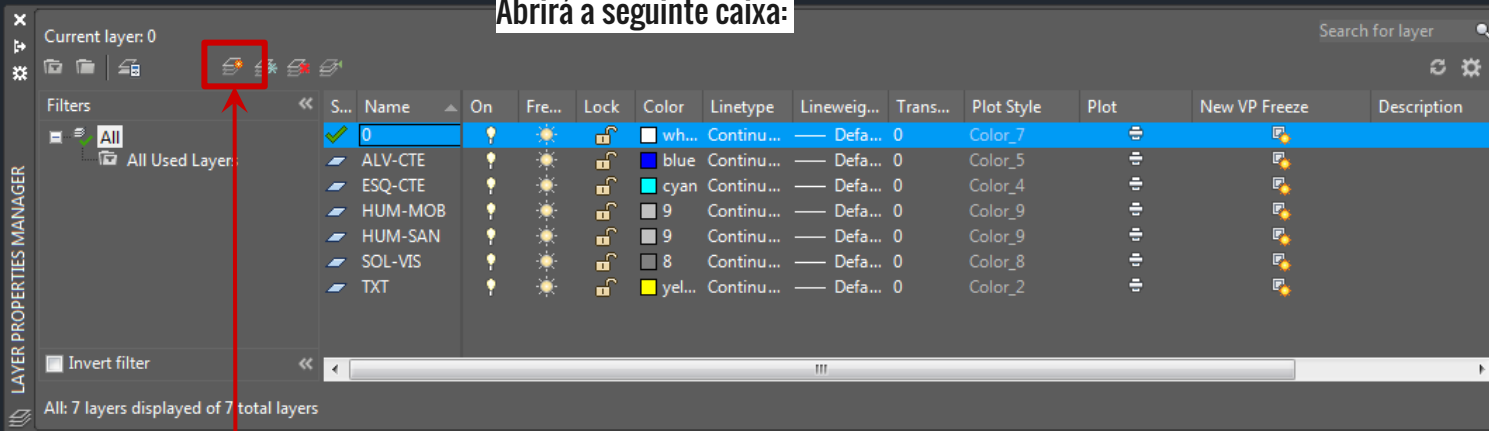
Abra o seu desenho do AutoCAD.

O ideal é criar os layers antes de iniciar o desenho, mas caso você ainda não tenha criado nenhum layer, é assim que ele parecerá.



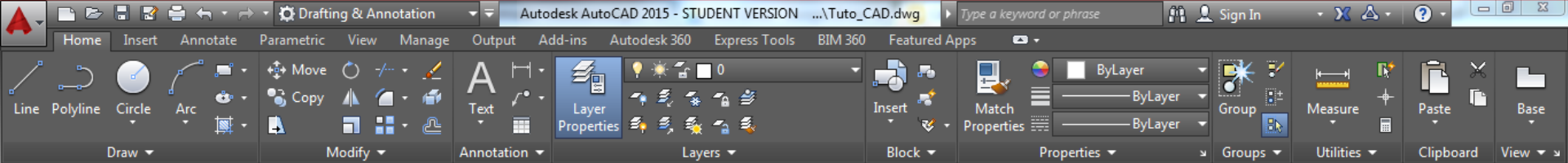


Para criar um novo layer, acesse a aba *Home*, no grupo de Ferramentas *Layers*, acesse o comando *Layer Properties*, ou, se preferir, digite o atalho LA e dê ENTER. Abirá a seguinte caixa:



Selecione o Layer 0 e clique no ícone *New Layer*.





[-] [Top] [2D Wireframe]

Congelar o Layer

Bloquear o layer para que seus objetos não possam ser modificados.

Podemos editar as configurações do layer com um duplo clique nas informações.

Nome do Layer

Ative ou Desative a visualização do layer na área de desenho.

Layer ativo

Cor associada ao layer

Tipo de linha do layer-tracejada. contínua, etc.

Espessura de linha do layer (Não modificar por aqui..)

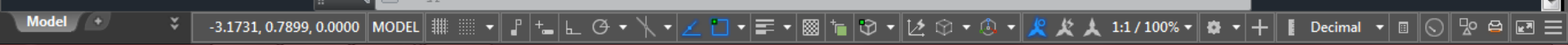
Layer imprimível ou não.

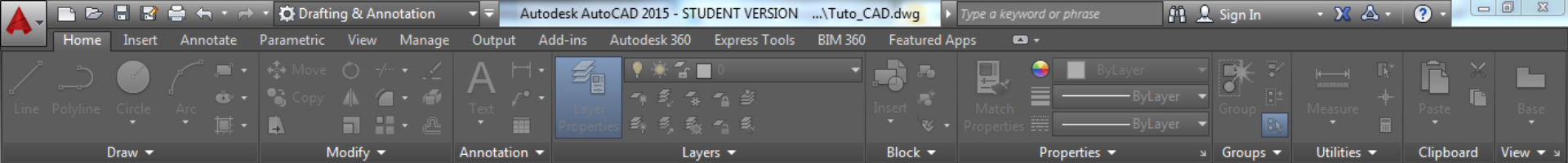
Current layer: 0

Filters: All, All Used Layers

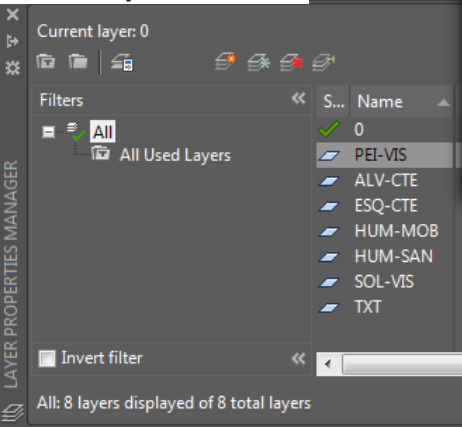
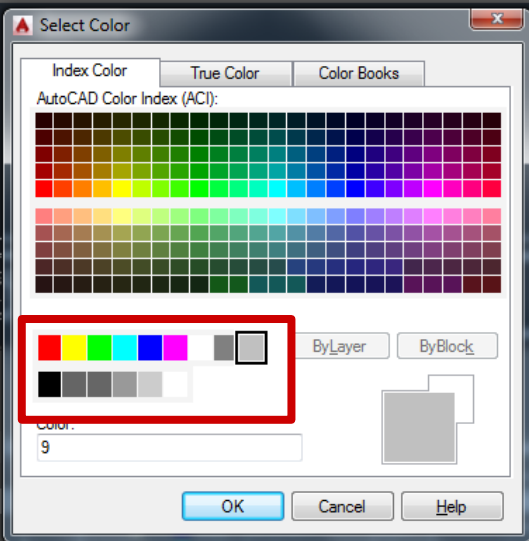
On	Freeze	Lock	Color	Linetype	Lineweight	Transp.	Plot Style	Plot	New VP Freeze	Description
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	wh...	Continu...	— Defa...	0	Color_7	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	wh...	Continu...	— Defa...	0	Color_7	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	blue	Continu...	— Defa...	0	Color_5	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	cyan	Continu...	— Defa...	0	Color_4	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	Continu...	— Defa...	0	Color_9	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	Continu...	— Defa...	0	Color_9	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	Continu...	— Defa...	0	Color_8	<input type="checkbox"/>	<input type="checkbox"/>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	yel...	Continu...	— Defa...	0	Color_2	<input type="checkbox"/>	<input type="checkbox"/>	

All: 8 layers displayed of 8 total layers



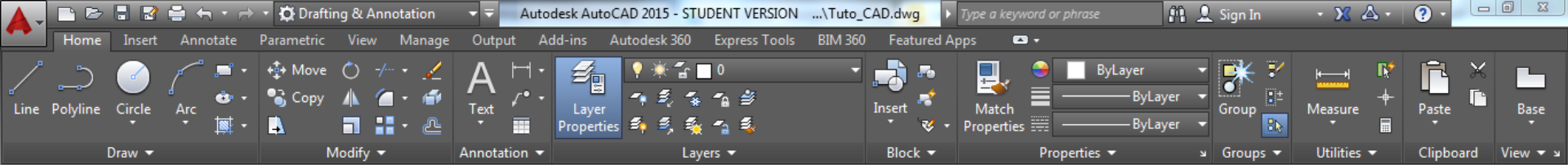


Após editado o nome do layer para sua identificação, dê um duplo clique na cor do layer e modifique-a de preferência com uma das cores destacadas ao lado. A primeira fila de cores gerará nossa hierarquia de linhas e a segunda fila será utilizada como nossa escala de cinzas para hachuras



Style	Plot	New VP Freeze	Description
7			
7			
5			
Color_4			
Color_9			
Color_9			
Color_8			
Color_2			





Tuto_CAD* x

[-][Top][2D Wireframe]

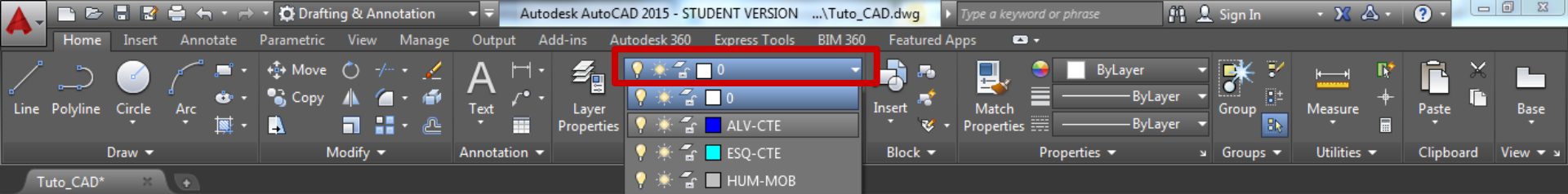
Agora, com todos layers criados, podemos fechar ou minimizar a Layer Properties Manager.



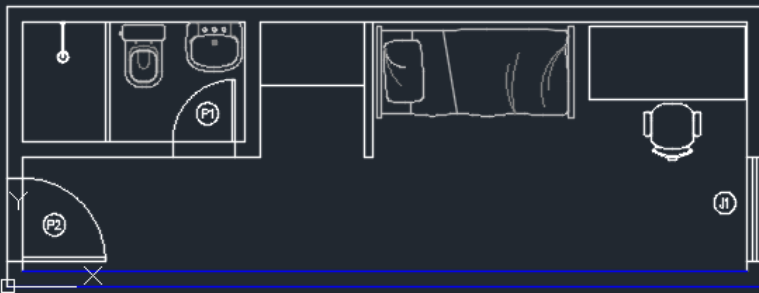
Filters	S...	Name	On	Fre...	Lock	Color	Linetype	Linewei...	Trans...	Plot Style	Plot	New VP Freeze	Description
All	✓	0	☑	☀	🔒	wh...	Continu...	— Defa...	0	Color_7	☑		
All Used Layers		ALV-CTE	☑	☀	🔒	blue	Continu...	— Defa...	0	Color_5	☑		
		ESQ-CTE	☑	☀	🔒	cyan	Continu...	— Defa...	0	Color_4	☑		
		HUM-MOB	☑	☀	🔒	9	Continu...	— Defa...	0	Color_9	☑		
		HUM-SAN	☑	☀	🔒	9	Continu...	— Defa...	0	Color_9	☑		
		PEI-VIS	☑	☀	🔒	9	Continu...	— Defa...	0	Color_9	☑		
		SOL-VIS	☑	☀	🔒	8	Continu...	— Defa...	0	Color_8	☑		
		TXT	☑	☀	🔒	yel...	Continu...	— Defa...	0	Color_2	☑		

All: 8 layers displayed of 8 total layers





Para aplicar um layer criado, selecione os objetos e clique na caixa selecionada. Escolha entre os layers, o que deseja.





Search Commands

Output the drawing to a plotter or other device



Plot
Plot a drawing to a plotter, printer, or file.



Batch Plot
Publish multiple sheets or drawings to a plotter, printer, DWF or PDF file.



Plot Preview
Display the drawing as it will be plotted.



View Plot and Publish Details
Display information about completed plot and publish jobs.



Page Setup
Control the page layout, plotting device, paper size, and other settings for each new layout.

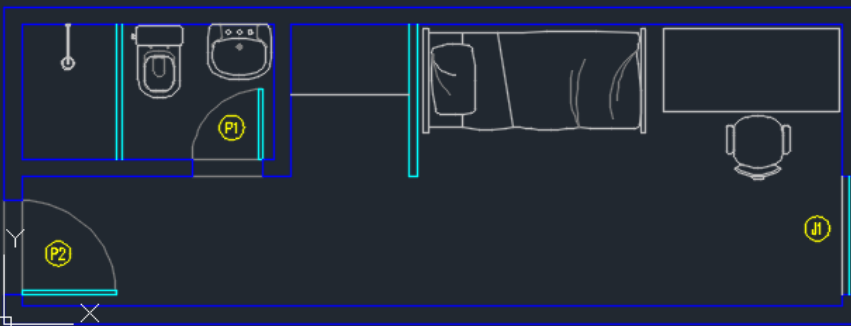


Manage Plotters
Display the Plotter Manager, where you can add or edit a plotter configuration.

Options

Exit Autodesk AutoCAD 2015

Agora, com o desenho devidamente formatado,
dê o comando Plot.



Model

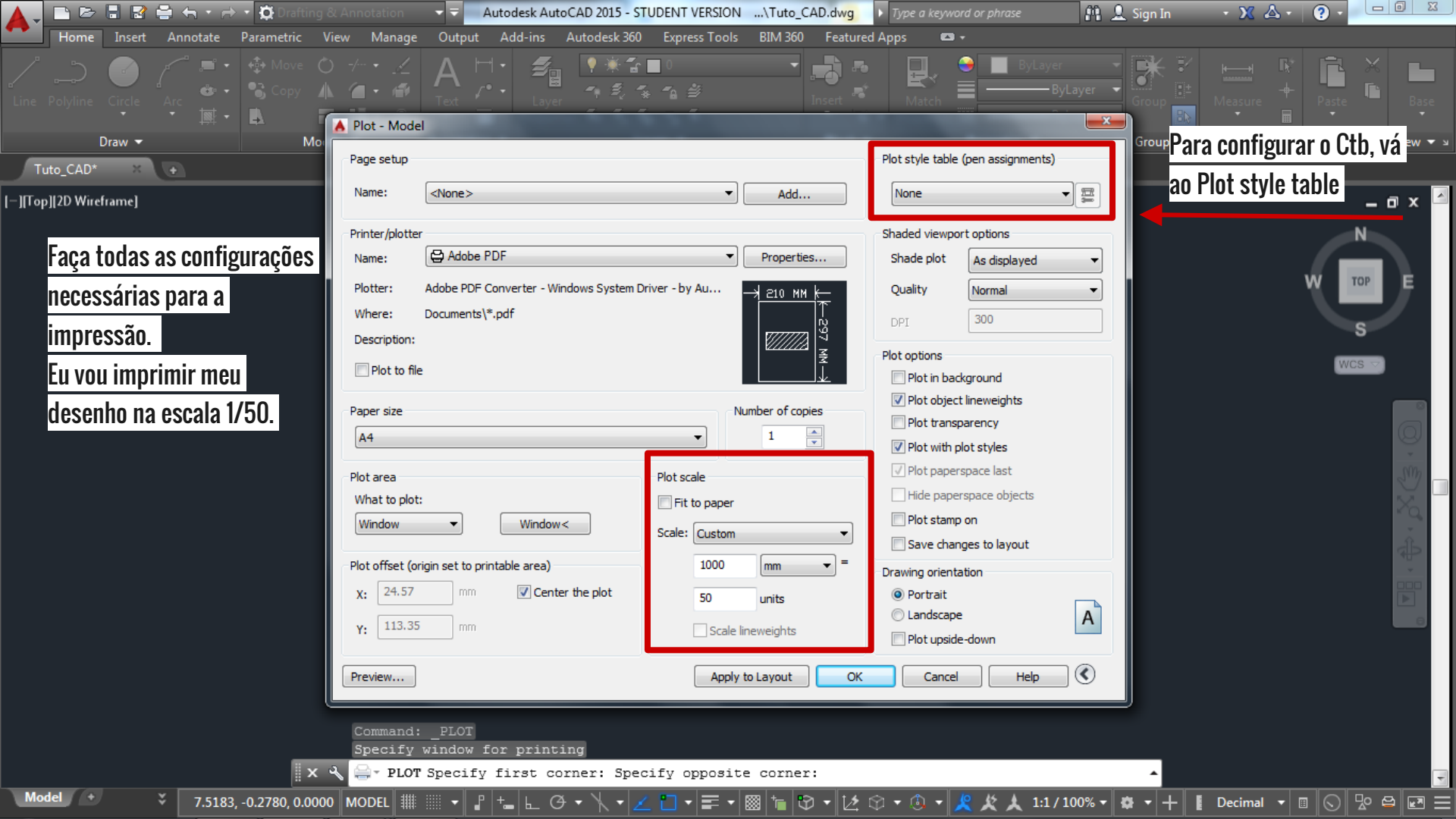
-3.2887, 3.8438, 0.0000

MODEL

Type a command

1:1 / 100%

Decimal



Faça todas as configurações necessárias para a impressão.
Eu vou imprimir meu desenho na escala 1/50.

Para configurar o Ctb, vá ao Plot style table

Plot - Model

Page setup
Name: <None> Add...

Printer/plotter
Name: Adobe PDF Properties...
Plotter: Adobe PDF Converter - Windows System Driver - by Au...
Where: Documents*.pdf
Description:
 Plot to file

Paper size: A4
Number of copies: 1

Plot area
What to plot: Window Window<
Plot offset (origin set to printable area)
X: 24.57 mm Center the plot
Y: 113.35 mm

Plot style table (pen assignments)
None

Shaded viewport options
Shade plot: As displayed
Quality: Normal
DPI: 300

Plot options
 Plot in background
 Plot object lineweights
 Plot transparency
 Plot with plot styles
 Plot paperspace last
 Hide paperspace objects
 Plot stamp on
 Save changes to layout

Drawing orientation
 Portrait
 Landscape
 Plot upside-down

Plot scale
 Fit to paper
Scale: Custom
1000 mm =
50 units
 Scale lineweights

Preview... Apply to Layout OK Cancel Help

Command: PLOT
Specify window for printing

PLOT Specify first corner: Specify opposite corner:

7.5183, -0.2780, 0.0000

MODEL

1:1 / 100%

Decimal

Plot - Model

Page setup

Name: <None> Add...

Printer/plotter

Name: Adobe PDF Properties...

Plotter: Adobe PDF Converter - Windows System Driver - by Au...

Where: Documents*.pdf

Description:

Plot to file

Paper size

A4

Number of copies: 1

Plot area

What to plot: Window Window<

Plot offset (origin set to printable area)

X: 24.57 mm Center the plot

Y: 113.35 mm

Plot scale

Fit to paper

Scale: Custom

1000 mm =

50 units

Scale lineweights

Plot style table (pen assignments)

- acad.ctb
- Grayscale.ctb
- Monochrome.ctb
- Plot_---25.ctb
- Plot_100-125.ctb
- Plot_250---.ctb
- Plot_50.ctb
- Plot_500---.ctb
- Plot_75.ctb
- Plot_Screening 100%.ctb
- Plot_Screening 25%.ctb
- Plot_Screening 50%.ctb
- Plot_Screening 75%.ctb
- New...**

Plot paperspace last

Hide paperspace objects

Plot stamp on

Save changes to layout

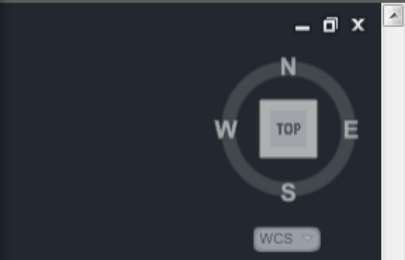
Drawing orientation

Portrait

Landscape

Plot upside-down

Preview... Apply to Layout OK Cancel Help



Selecione a opção New...

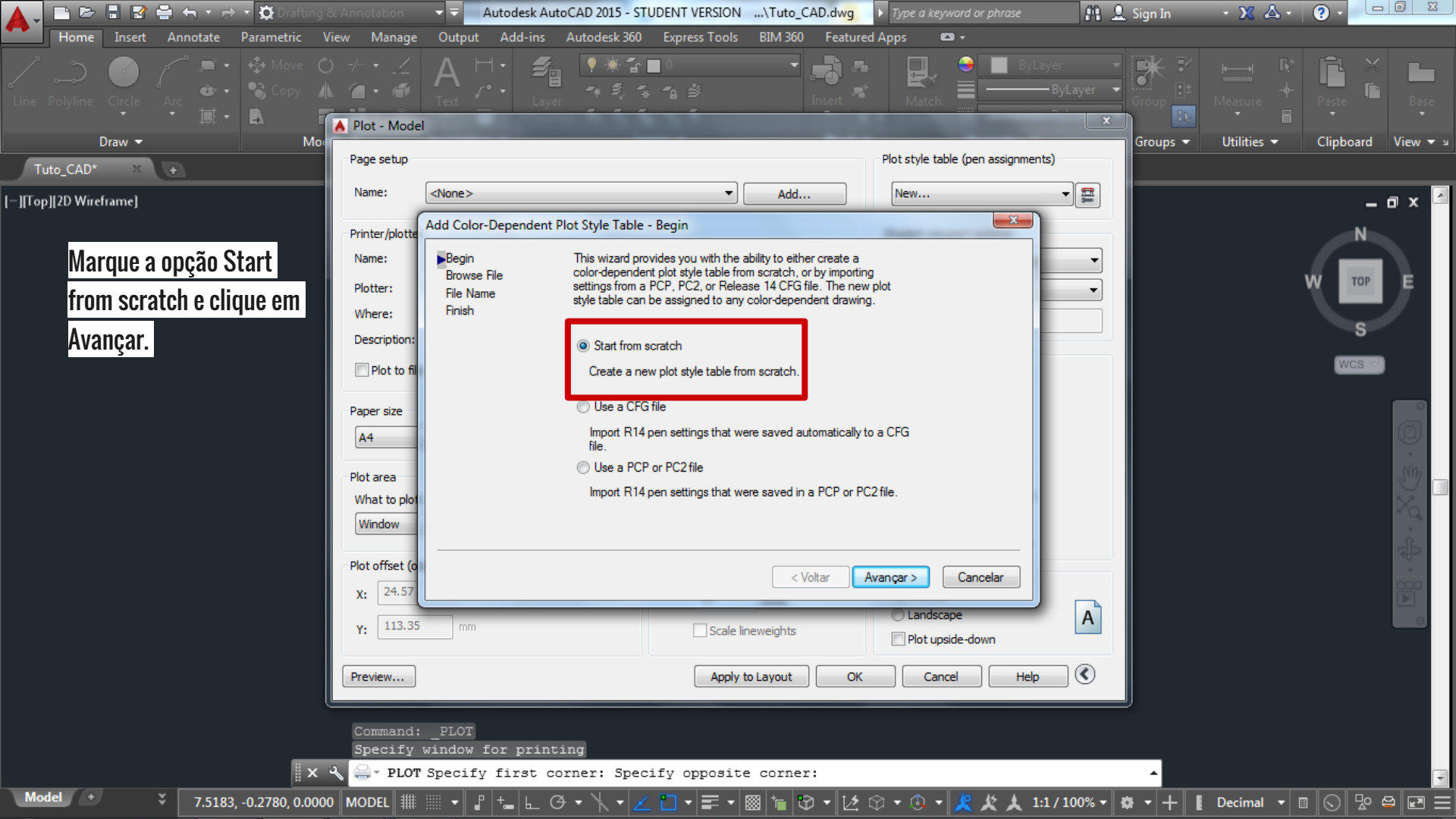
Tuto_CAD* x

[-] [Top] [2D Wireframe]

Command: PLOT

Specify window for printing

PLOT Specify first corner: Specify opposite corner:



Marque a opção Start
from scratch e clique em
Avançar.

Plot - Model

Page setup
Name: <None> Add... Plot style table (pen assignments)
New...

Printer/plotter
Name: Plotter: Where: Description: Plot to file

Paper size
A4

Plot area
What to plot
Window

Plot offset (mm)
X: 24.57 Y: 113.35

Scale lineweights

Landscape Plot upside-down

Preview... Apply to Layout OK Cancel Help

Add Color-Dependent Plot Style Table - Begin

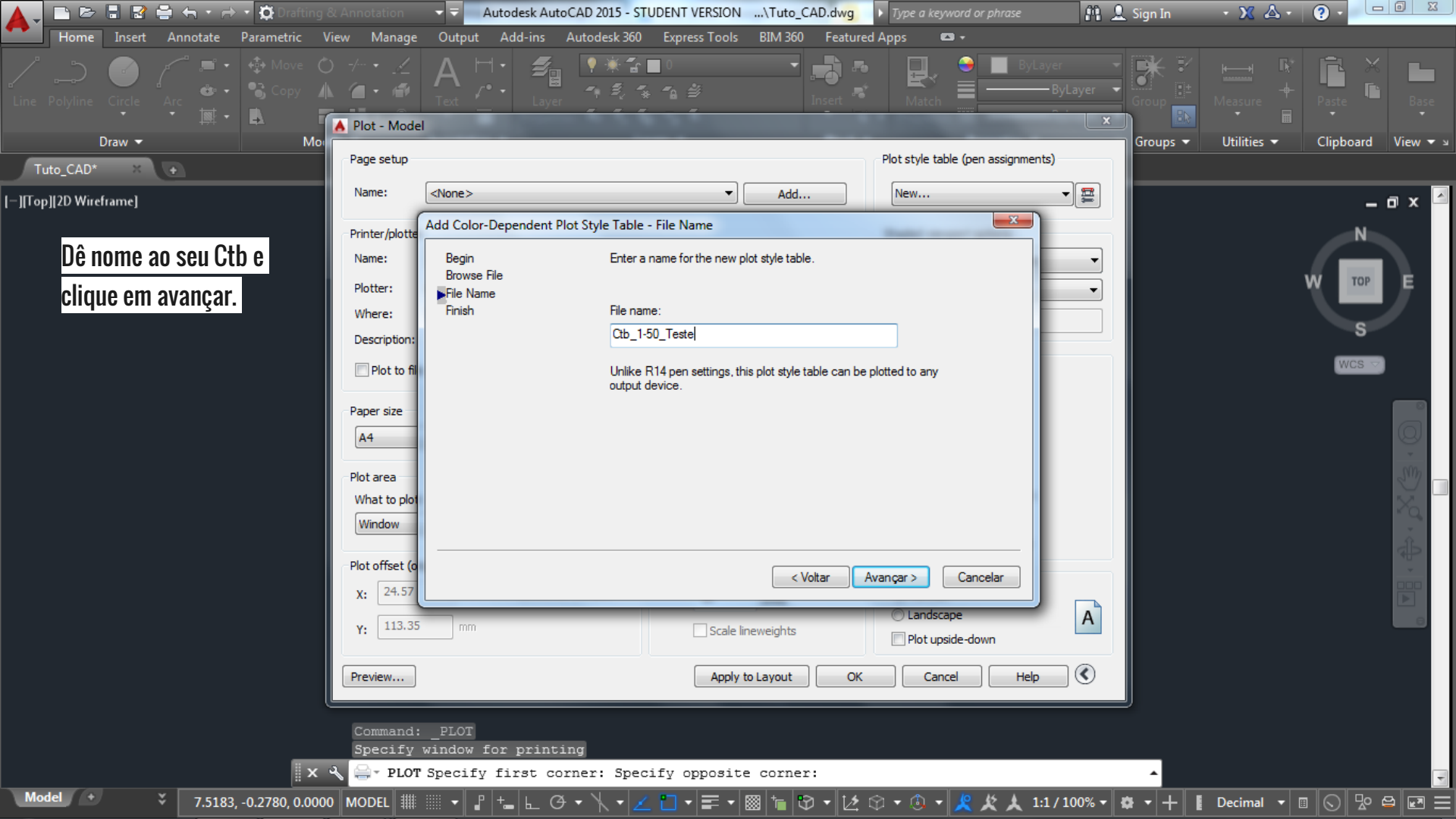
This wizard provides you with the ability to either create a color-dependent plot style table from scratch, or by importing settings from a PCP, PC2, or Release 14 CFG file. The new plot style table can be assigned to any color-dependent drawing.

- Start from scratch**
Create a new plot style table from scratch.
- Use a CFG file
Import R14 pen settings that were saved automatically to a CFG file.
- Use a PCP or PC2 file
Import R14 pen settings that were saved in a PCP or PC2 file.

< Voltar Avançar > Cancel

Command: _PLOT
Specify window for printing

PLOT Specify first corner: Specify opposite corner:



Dê nome ao seu Ctb e clique em avançar.

Plot - Model

Page setup

Name: <None> Add...

Plot style table (pen assignments)

New...

Printer/plotter

Name: <None>

Plotter: <None>

Where: Finish

Description:

Plot to file

Paper size

A4

Plot area

What to plot

Window

Plot offset (mm)

X: 24.57

Y: 113.35 mm

Scale lineweights

Landscape

Plot upside-down

Preview...

Apply to Layout OK Cancel Help

Add Color-Dependent Plot Style Table - File Name

Enter a name for the new plot style table.

File name:

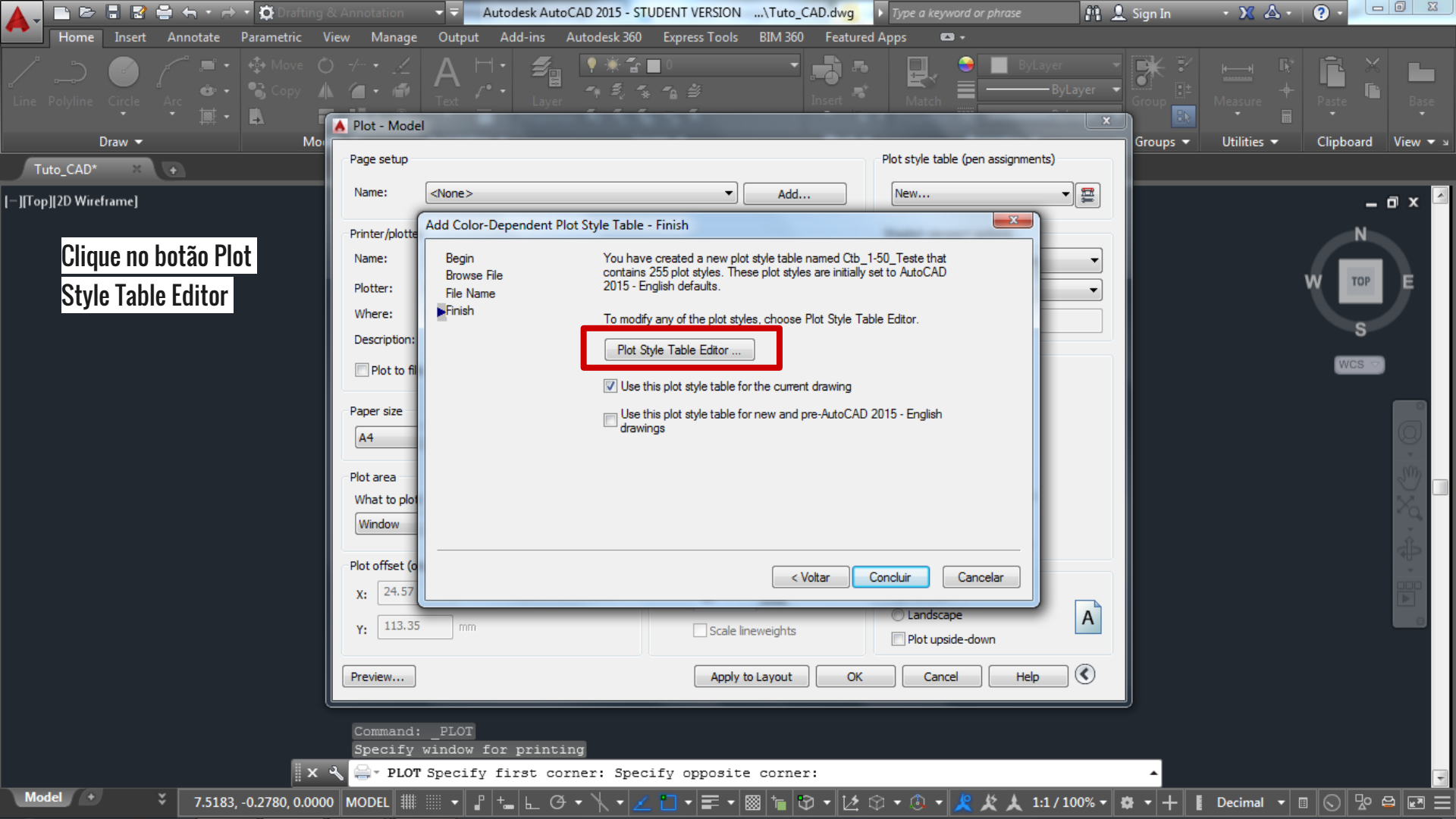
Ctb_1-50_Teste

Unlike R14 pen settings, this plot style table can be plotted to any output device.

< Voltar Avançar > Cancelar

Command: PLOT
Specify window for printing

PLOT Specify first corner: Specify opposite corner:



Clique no botão Plot
Style Table Editor

Plot - Model

Page setup: Name: <None> Add... Plot style table (pen assignments): New...

Printer/plotter: Name: Browse File Name: Where: Finish Description: Plot to file

Paper size: A4

Plot area: What to plot: Window

Plot offset (mm): X: 24.57 Y: 113.35

Scale lineweights Landscape Plot upside-down

Preview... Apply to Layout OK Cancel Help

Add Color-Dependent Plot Style Table - Finish

Name: Ctb_1-50_Teste
You have created a new plot style table named Ctb_1-50_Teste that contains 255 plot styles. These plot styles are initially set to AutoCAD 2015 - English defaults.

To modify any of the plot styles, choose Plot Style Table Editor.

Plot Style Table Editor ...

Use this plot style table for the current drawing
 Use this plot style table for new and pre-AutoCAD 2015 - English drawings

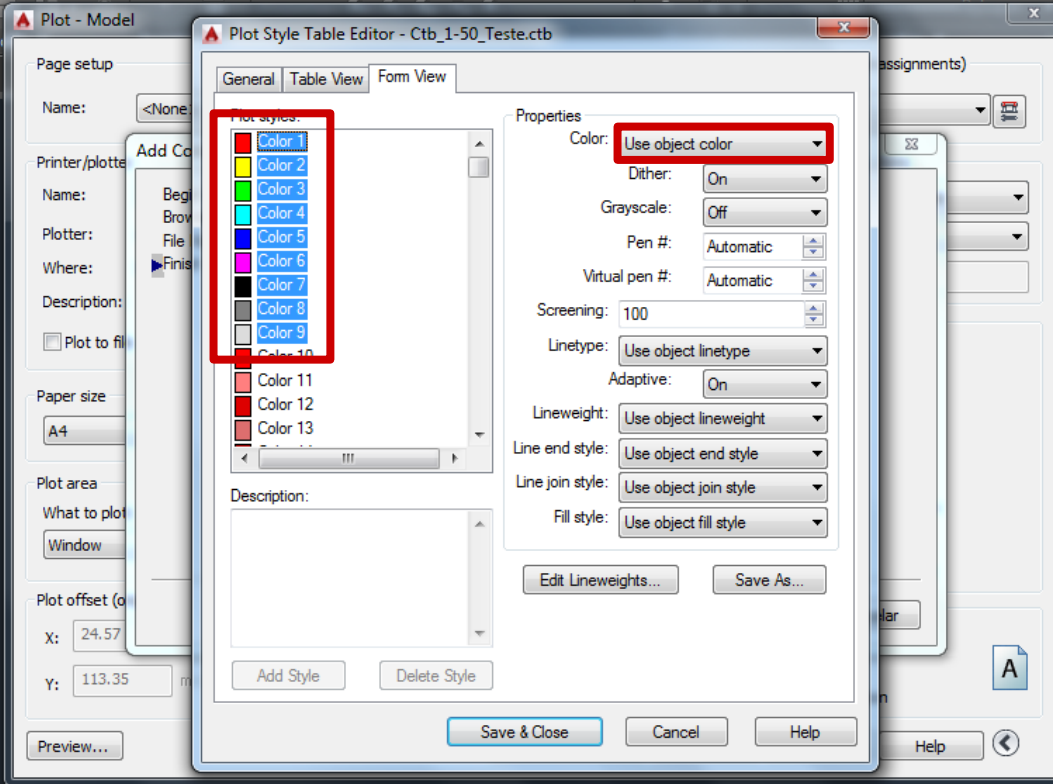
< Voltar Concluir Cancelar

Command: PLOT
Specify window for printing

PLOT Specify first corner: Specify opposite corner:

Agora finalmente
configuraremos as penas
de nosso projeto.

Primeiramente,
Selecione as 9 primeiras
cores e em Properties-color,
modifique a cor para black



Command: _PLOT
Specify window for printing

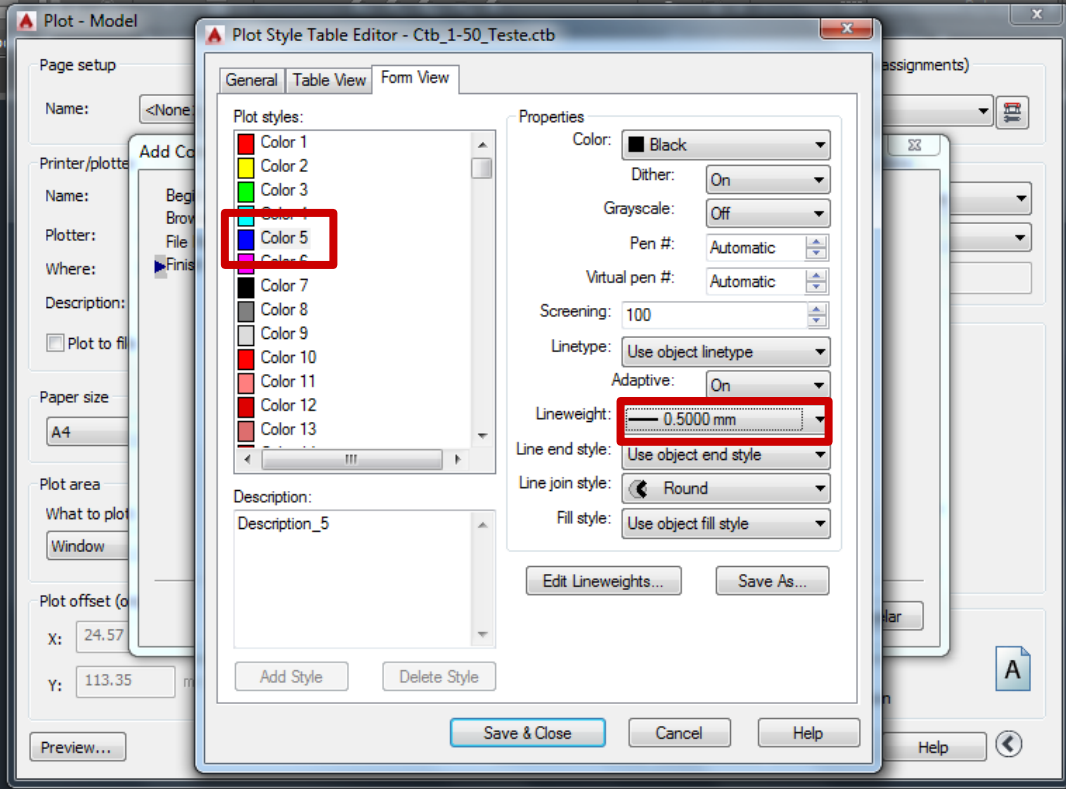
PLOT Specify first corner: Specify opposite corner:

Agora vamos dar espessuras para as cores.

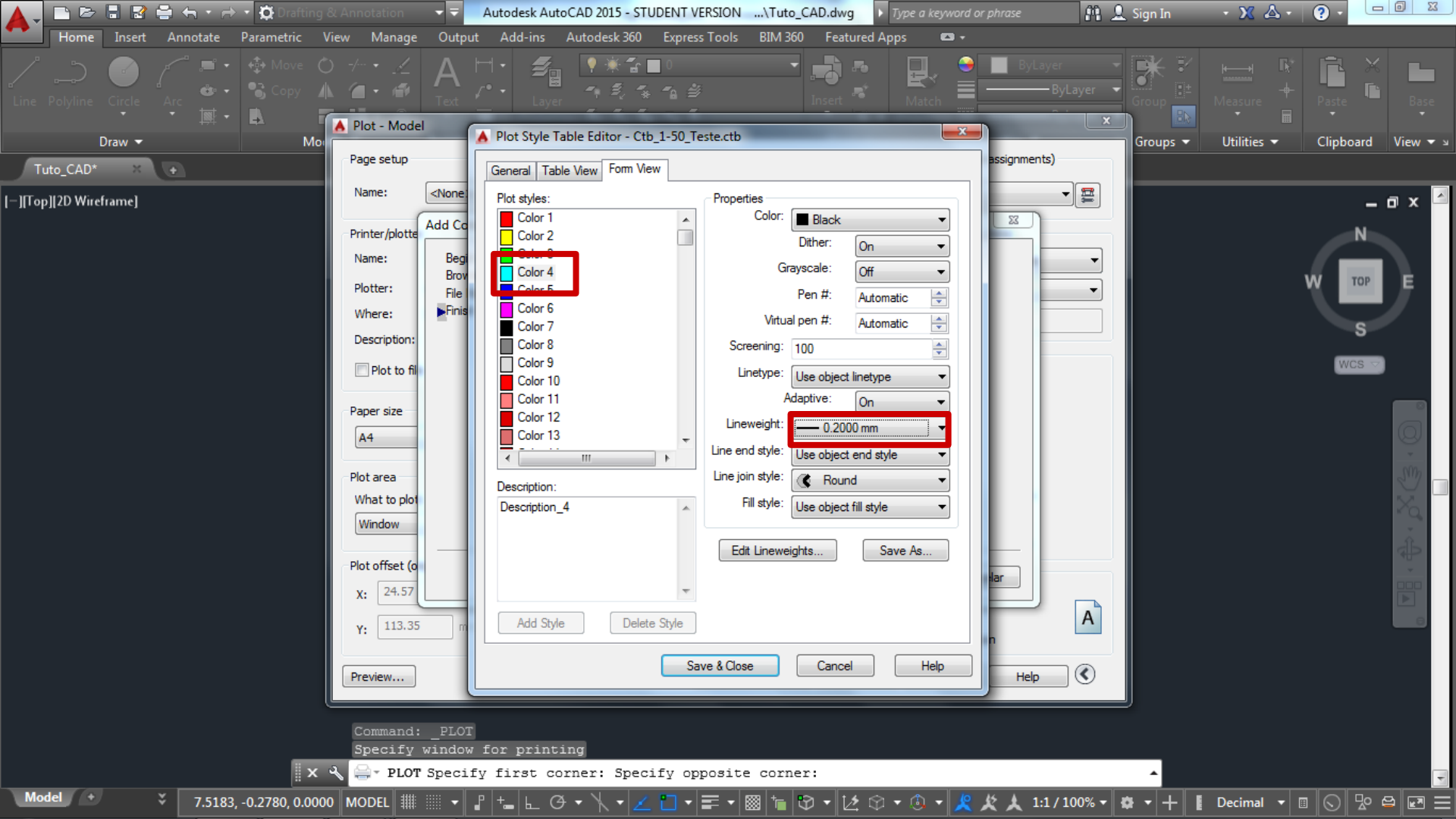
Vamos clicar, por exemplo, na Cor 5 - blue, que eu defini para alvenaria em corte.

Agora, no campo Lineweight, selecionaremos a opção 0,5 que seria minha pena na escala 1:50.

Repita esse procedimento para todas as cores escolhidas para os layers e defina suas respectivas espessuras de linhas.



Command: PLOT
Specify window for printing
PLOT Specify first corner: Specify opposite corner:



Plot Style Table Editor - Ctb_1-50_Test.ctb

General Table View Form View

- Plot styles:
- Color 1
 - Color 2
 - Color 3
 - Color 4**
 - Color 5
 - Color 6
 - Color 7
 - Color 8
 - Color 9
 - Color 10
 - Color 11
 - Color 12
 - Color 13

Properties

Color: Black

Dither: On

Grayscale: Off

Pen #: Automatic

Virtual pen #: Automatic

Screening: 100

Linetype: Use object linetype

Adaptive: On

Lineweight: 0.2000 mm

Line end style: Use object end style

Line join style: Round

Fill style: Use object fill style

Edit Lineweights... Save As...

Save & Close Cancel Help

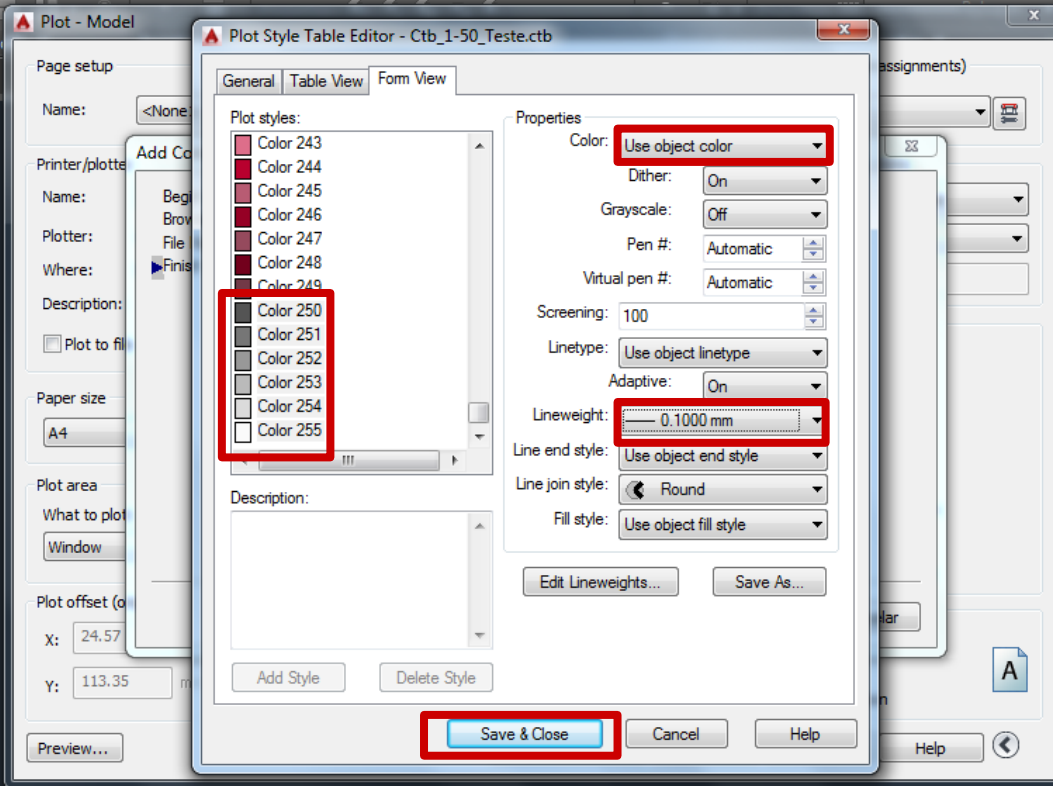
Command: PLOT
Specify window for printing

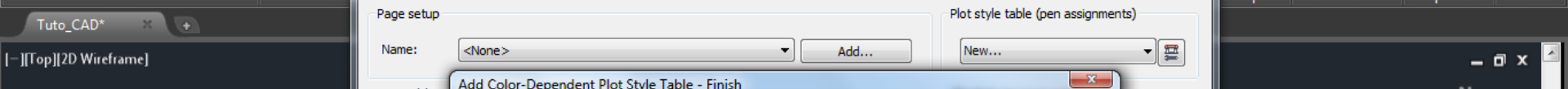
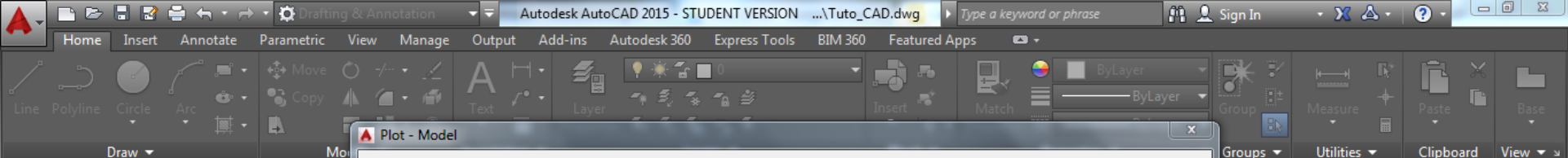
PLOT Specify first corner: Specify opposite corner:

Configuradas todas as espessuras de linhas para os layers que saíão em preto, configuraremos nossa escala de cinzas.

Selecione as cores de 250 a 255. Em Properties-color, deixe na opção Use object color e em Lineweight vamos colocar em 0,1mm.

Terminadas todas as modificações, clique no botão Save and Close.





Voltando para essa janela, marque a opção destacada caso esteja desmarcada e clique em *Concluir*.

Plot - Model

Page setup: Name: <None> Add... Plot style table (pen assignments): New...

Printer/plotter: Name: Browse File Name: Where: Finish Description: Plot to file

Paper size: A4

Plot area: What to plot: Window

Plot offset (mm): X: 24.57 Y: 113.35

Scale lineweights

Landscape Plot upside-down

Preview... Apply to Layout OK Cancel Help

Add Color-Dependent Plot Style Table - Finish

Name: Begin You have created a new plot style table named Ctb_1-50_Testes that contains 255 plot styles. These plot styles are initially set to AutoCAD 2015 - English defaults.

Plotter: Browse File Name: File Name: To modify any of the plot styles, choose Plot Style Table Editor.

Where: Finish

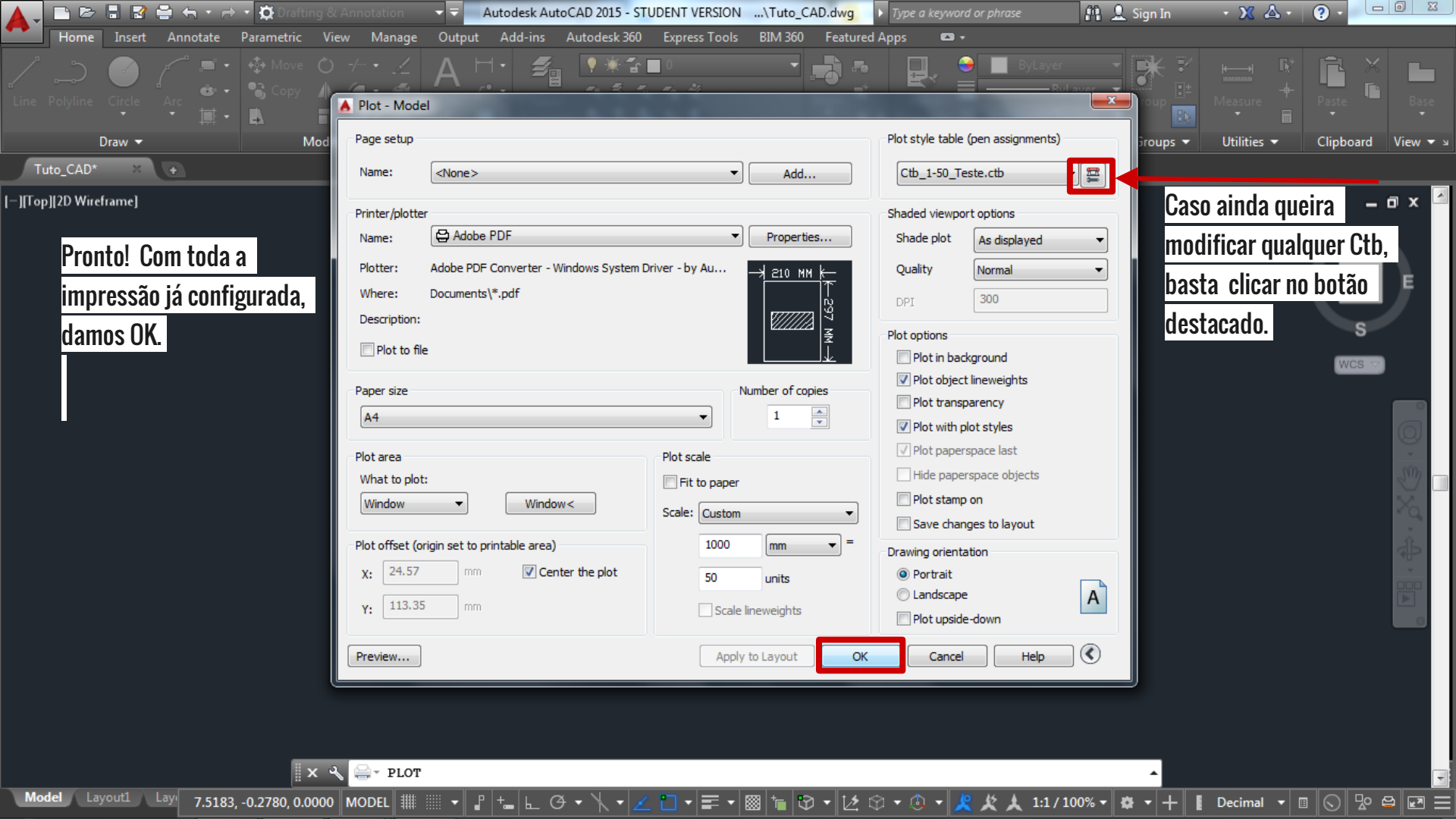
Description: Use this plot style table for the current drawing Use this plot style table for new and pre-AutoCAD 2015 - English drawings

Plot Style Table Editor ...

< Voltar **Concluir** Cancelar

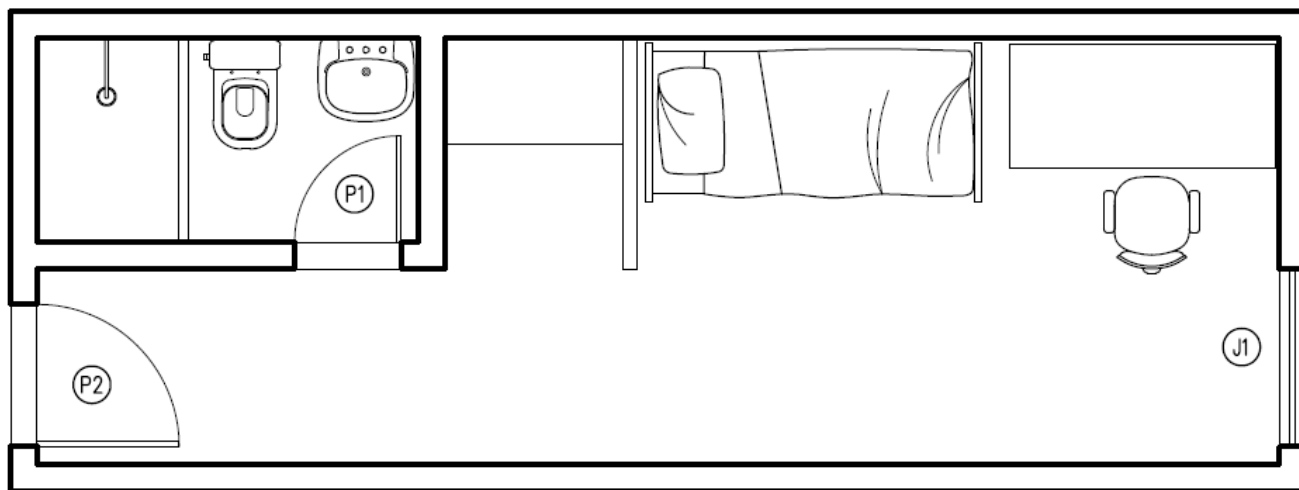
Command: PLOT
Specify window for printing
PLOT Specify first corner: Specify opposite corner:





Pronto! Com toda a impressão já configurada, damos OK.

Caso ainda queira modificar qualquer Ctb, basta clicar no botão destacado.



Esse é o resultado final de nossa impressão na escala 1/50.