

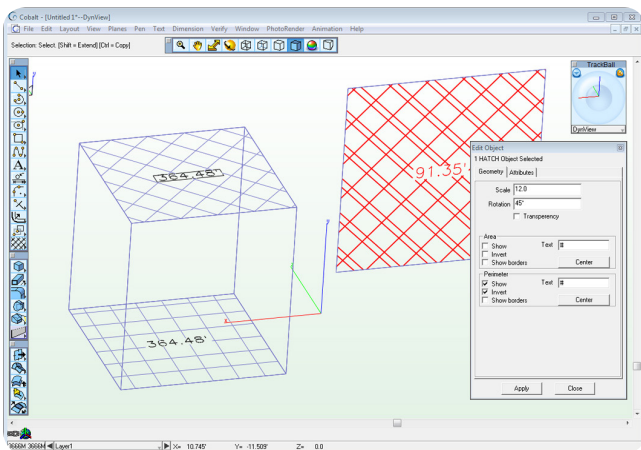
# The Design Explorer

## The Ashlar-Vellum User Newsletter

First Quarter, 2012

### Improved Hatching in Cobalt, Xenon & Argon v9

The hatching function is being enhanced in the upcoming version 9 of Cobalt, Xenon and Argon. Hatching options will include calculation and display of perimeters and areas of any designated object. Hatching patterns can only be applied to a 2D object but can be used in any 3D plane.



### Seeking New OEM Opportunities

Ashlar-Vellum is always seeking new opportunities to partner with other companies who could use a custom extension to our CAD or 3D modelling software products. We're particularly equipped to work with those companies that need a CAD-related product to enhance their own manufacturing equipment. These spin-off software products always require enhancements to our core code, benefitting our retail software users, while at the same time providing special features only available to that equipment manufacturer, giving them a significant advantage over their competitors.

### Make Our Day

*"During the period I was test driving Graphite I experienced an issue that I turned into your Technical Support group. I was most impressed with their rapid and professional response. I was even more impressed that because the issue was indeed a known "issue" being addressed in an upcoming release, I was given a 2 week extension to my evaluation period. It was during this extension I chose to evaluate Cobalt as well. ...Ashlar's Graphite and Cobalt products would be a very welcome tool to have in either of my current ventures."*

—Kent Barns, Licking, MO, USA

*"I really feel I need to express my thoughts on your software. After having to use AutoCAD and Mastercam where I work I must tell you what a pleasure it is to come home and do some real design with Cobalt. It's nice to be able to think about what I want to do and not about how to do it. Thank for a great product!!!"*

—Cliff Hastie, Mount Forest, ON, Canada



Customers

*"I have always wanted to try and convey just how profoundly important Ashlar-Vellum has been for my life in ways that a kind of technical or engineering mind set would probably never imagine. But an educational psychologist would and does."*

—Doug Blair, Gatlinburg, TN, USA

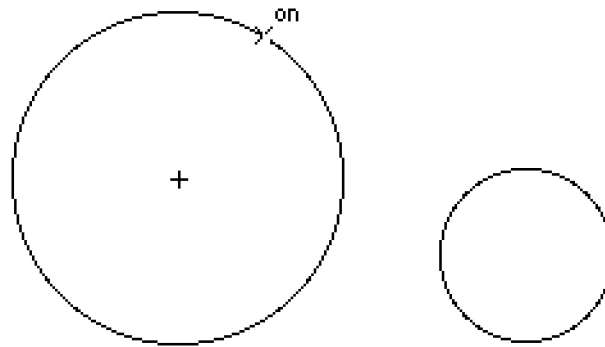
## Drawing & Modelling Quick Tip

### *Creating Lines Tangent and Parallel to Objects*

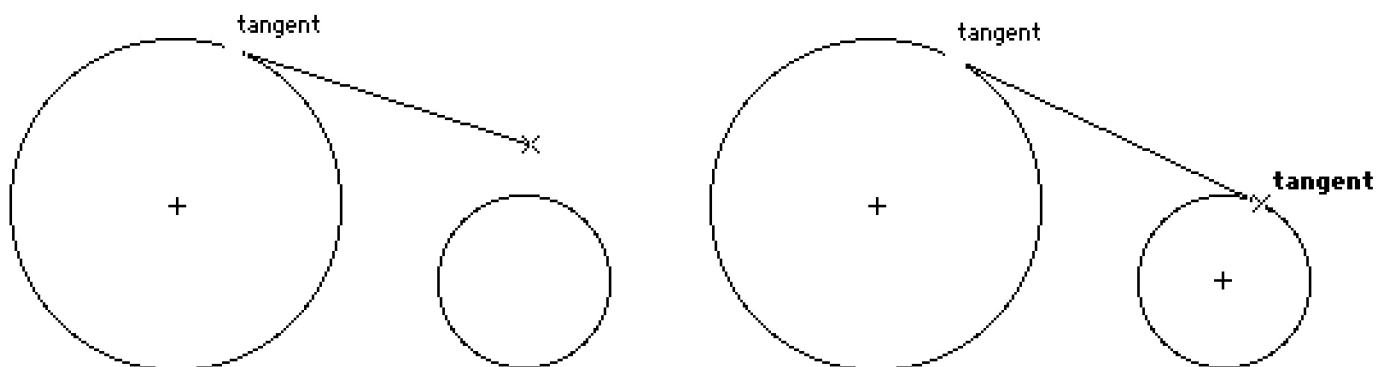
Did you know that hidden inside some of Ashlar-Vellum line tools is the ability to create tangent and perpendicular lines? In competitive CAD and 3D modelling programs this can take seven to 12 different steps. In Graphite, Cobalt, Xenon or Argon, it only requires two.

To create a line tangent to any object:

1. Select either the Single or Connected Line tool from the program's tool palette.
2. Move the cursor near the object so that the Drafting Assistant displays the word **on**. (This will not work if anything other than on is displayed.)



3. Drag the mouse away from the object in a tangent direction and pause, holding the mouse button down.
4. A line appears and the Drafting Assistant displays the word **tangent** near the beginning of the line. As the mouse moves, notice that the line will stay tangent.



5. Place the second endpoint of the line at another point on another object and release the mouse. This also works for arcs, circles, ellipses and splines. Try it.

## Alchemy:Adept & Alchemy:Essential

### File transformation...with a little magic.™

Ashlar-Vellum Alchemy:Adept and Alchemy:Essential are file translation programs based on technology from [TransMagic](#).

With either program, Ashlar-Vellum users can open SolidWorks and Autodesk Inventor files directly in Cobalt, Xenon and Argon. With Alchemy:Adept you can also directly access Catia, Pro/E and Siemens Unigraphics files.

While Ashlar-Vellum 3D modelling products all have extensive file import capabilities built-in, Alchemy extends that list even further, allowing

Cobalt, Xenon and Argon users to import the geometry from a long list of other 3D modellers. Use it to take advantage of our unique Organic Workflow™ and Vellum® interface on either Mac or Windows. Alchemy offers some of the most advanced healing technology and file repair tools available, saving hours of manual rework. The Alchemy plug-in will be accessed directly from within v8 SP3 of Cobalt, Xenon or Argon. To learn more, visit the [Alchemy product page](#).

Import From	Alchemy: Essential	Alchemy: Adept
<b>Catia v5</b> *.CATpart, *.CATproduct, *.cgr R6 to R21		×
<b>Pro/ENGINEER</b> *.prt & *.asm, V16 to Wildfire 5		×
<b>Siemens Unigraphics</b> .prt, V11-18, NX to NX7.5		×
<b>SolidWorks</b> *.sldasm & *.sldprt, Version 98-2011	×	×
<b>Autodesk Inventor</b> *.ipt & *.iam, up to Version 2012	×	×
<b>Catia v4</b> *.model, *.exp, *.dat, *.session, sequential files up to 4.2.4	×	×
<b>ACIS</b> .sat, R2-R22	×	×
<b>Parasolid</b> .x_t, V10-V24	×	×
<b>STEP</b> .stp, AP203, AP214	×	×
<b>IGES</b> .igs, up to Version 5.3	×	×

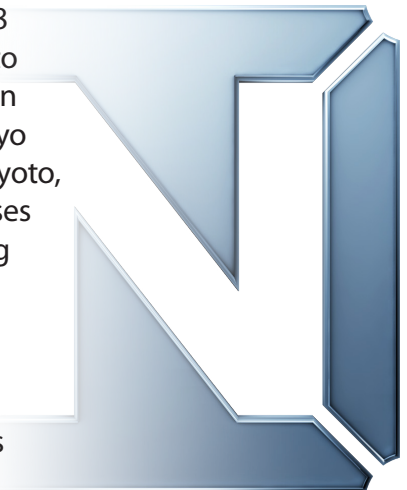
## Welcome Back Fedor



Fedor Lyamchick has returned to work with the Ashlar-Vellum Cobalt development team. He's most recently been programming for a large contract developer in the Kiev area. In addition to his work, Fedor likes to read and play computer games. We're pleased to have his technical prowess and outgoing personality back at Ashlar-Vellum.

## Vellum Nitrogen™

Vellum Nitrogen v8 SP2 has delivered to the first customer in Japan. Kyoto Bunkyo Junior College in Kyoto, Japan has 25 licenses working. According to Seiki Miyamoto, International OEM Coordinator, "The customer is happy and the program is performing well."



## Walkin' in Sunshine: The Joy of No Electricity Bill



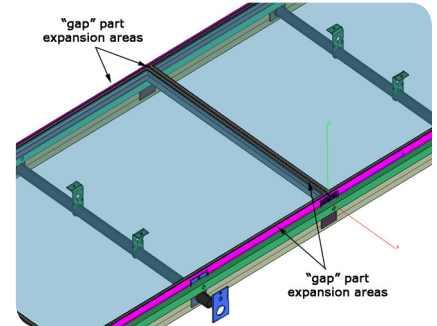
*Martin Brunt finds huge satisfaction as a solar designer in helping people tie into the utility grid, and not only cut their electricity bills, but sell power back to the utility company. He is on the forefront of designing and building prefabricated solar arrays for dual-use carports, canopies and awnings that harness the power of the sun while at the same time provide shade below, and minimize any compromise to the roofing envelope. He's been an Ashlar-Vellum software user for almost 20 years. Cobalt™ CAD and 3D modelling software has helped him solve a number of design problems across the industries in which he's been a part.*

For example, Brunt has a unique way of designing gap tolerances necessary with a number of materials. Awhile back, while struggling with the tolerances on a stainless steel cabinet he had an epiphany, suddenly realizing that in Cobalt the gap could be a parametric part. Instead of over-thinking everything, trying to go from the part forward, Brunt started designing all the gap tolerances to be a gap of air. The air itself was designated as a solid. This became critical when he later began designing solar array systems with their inherent issues of expansion and contraction where glass must be able to float. Says Brunt, "It was a very powerful design feature that I don't think a lot of people use."

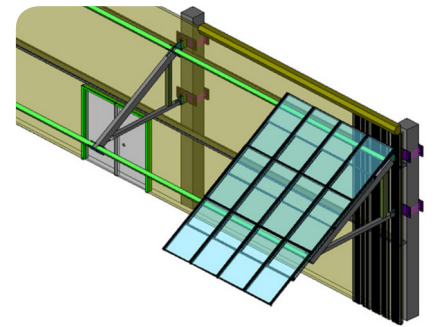
Cobalt is also helping Brunt and the solar electric contractor for which he designs. By developing pre-fabricated solar systems they can eliminate a huge amount of the labour necessary to install a system on a roof. Brunt uses Cobalt for everything including the design and engineering of each system, as well as the drawings for the permit process. He also finds Cobalt a very useful tool to minimize the site labour necessary for installing solar since roof-top conditions are not optimal for safety.

Brunt feels Cobalt is an especially ideal product for small businesses doing specialty products who want to control the process and automate it as much as possible. Not only did he learn to use it in three days, he started making money with it in the first week. Brunt tells us,

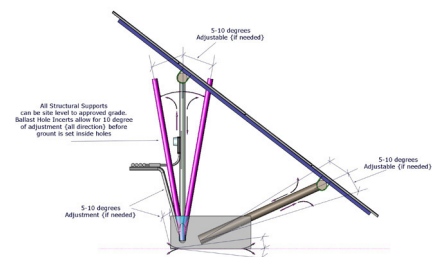
***"I started seeing all the things I could do with Cobalt. From there on out I forced myself to do things in 3D...I've always made money with Cobalt."***



Brunt uses Cobalt CAD and 3D models to create gap tolerances as parametric parts.



Cobalt facilitates the design, engineering, and permitting discussions of solar arrays.



### Background/Contact

For more details on this project contact:

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