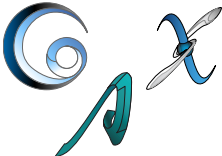# The Design Explorer
The Ashlar-Vellum User Newsletter

Third Quarter, 2007

Crash on Launch Hot Patches Released

The following hot patches have been released eliminating over 98% of the crash on launch issues that were introduced on Mac for a handful of customers earlier this year. Release dates and builds for the hot patches appear on the right.

Product		Version	Build	Date
Graphite		v7 SP3	788	June 22, 2007
		v8 SP0	812	August 8, 2007
Cobalt, Xenon, Argon		v7 SP2	616	August 8, 2007
		v8 SP0 BETA	811	August 16, 2007

Beta Builds

Beta builds for Cobalt, Xenon and Argon v8 were added to the website in July along side those for Windows. As of this writing they are v8 SP0 BETA Build 811a for Windows and Mac.

These Mac builds are for Power PC with OS X. The universal binary version to support the Intel chip on Mac is now in early beta testing among a few select users and will be released for public beta shortly.

In the meantime the Windows builds can be used under the Parallels 3.0 or Boot Camp emulation on the Intel Mac. At this time we know that the precise hidden line option in Model to Sheet and the dimensional constraints do not work in the PPC Mac versions.

New Address

Our Austin office has a new mailing address:

Ashlar-Vellum
9600 Great Hills Trail
Suite 150W-1575
Austin, TX 78759 USA

Our European office address remains the same.

We have become a virtual organization working from personal offices anywhere around the world. This new address gives us excellent access to training facilities and office space when we need it.

In the process we've been installing a new telephone system. We apologize if you've had difficulty reaching us. It has been most frustrating to us as well. You can now dial the same telephone numbers as usual:
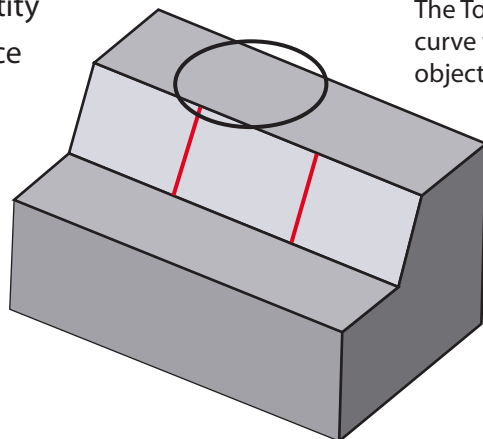
+1 800 877 2745 toll free
+1 512 250 2186 local
+1 928 396 9992 fax

Curve/Surface Projection Tool Enhanced

The Curve/Surface Projection tool in the upcoming v8 of Cobalt, Xenon and Argon supports imprinting profiles onto surfaces and solids to create surface subdivisions.
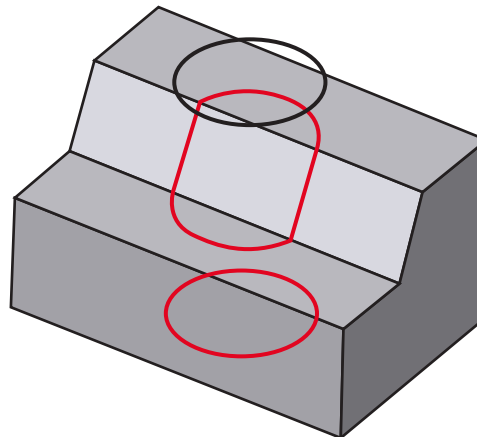
Select the Curve/Surface Projection tool from the Surface Utilities tool palette and these options appear in the message line:

- Through
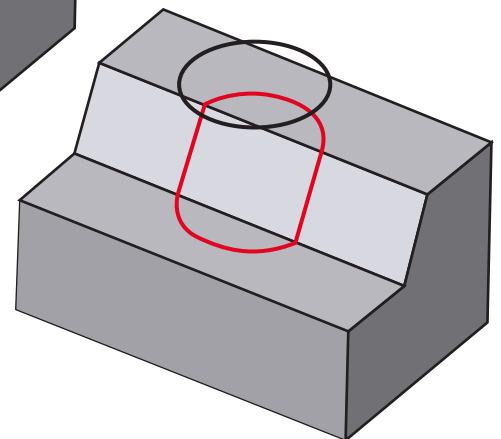- To Entity
- To Face

The Through mode projects a curve on a surface that intersects the entire object.

The To Entity option projects a curve where it first touches the object.

Use the To Face mode to project a curve only on the specified face.

New People

Ashlar-Vellum is growing again, adding new team members to keep up with the demands of our customers.

Georgiy Sokolov grew up and went to school in Kiev. He likes sports and is an avid Rubik's cube collector, especially those of higher levels of difficulty and unusual shapes. He's also an active cyber-sport participant.

Alexandr Sapozhnik is from Chernivtsi in southwestern Ukraine. After studying applied physics at Kiev Polytechnic he worked for two other companies as a programmer before joining our Cobalt development team. Alexandr likes sports, films and books, and especially taking walks with his friends.

Andrey Mazyr studies computer science at Kiev University of Civil Aviation. His place on our Cobalt team is his first job as a programmer. He's a music student, especially the guitar, and likes sports and reading.

Taras Kiselov was the first new hire especially for our Snap-on team. Taras grew up in Glevaha, a small town not far from Kiev. Taras' former experience in construction, building maintenance and as a locksmith makes him well suited as a draftsperson for our Snap-on project. Taras is inclined toward serious philosophical discussions regarding books and art-house films. He also enjoys journaling.

Parallels 3.0 Now Works with Ashlar-Vellum Software

Parallels has just released build 4560 of the Parallels Desktop version 3.0. Offering high performance 3D graphics support, this new version works well with Cobalt, Xenon and Argon v7 and with all the v8 betas, including support for the real-time environment maps. This allows users to run Microsoft Windows in a window under Mac OS X, on the Intel Mac.

Previous builds of version 3.0 interfered with the Drafting Assistant, but this build tested well running Windows XP. Vista has not been specifically tested.
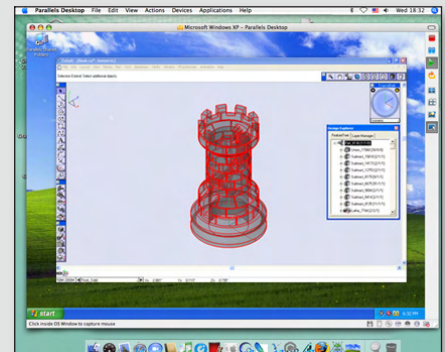
Also available is VMware Fusion. This emulation product is still in beta and has similar performance to Parallels 2.0 which for Cobalt, Xenon and Argon is acceptable.

The best bet for great graphic performance running Cobalt, Xenon, Argon or Graphite on the Mac Intel is still Boot Camp from Apple.

When Tech Support Can't Reproduce Your Problem

There's nothing more frustrating than getting an email back from tech support saying in effect, "We have tested the issue on three machines in our office and cannot reproduce the problem."

Your reaction is probably the desire to reach through your network cable and strangle someone.

At Ashlar-Vellum we realize that just because we can't reproduce a problem, it doesn't mean you're not seeing it. Please understand that MOST technical support tickets are specific to individual users. Other than registration code issues, there are very few problems that affect more than 2% of our user population, and therefore there are rarely pat answers that can be given.

So how can you help us help you to solve the problem?

When our tech support team cannot reproduce a problem it stems from either one of two reasons:

1. The problem is specific to your system, situation or set up.

2. We don't completely understand the problem.

Let's talk about how to make further progress toward solving each of these.
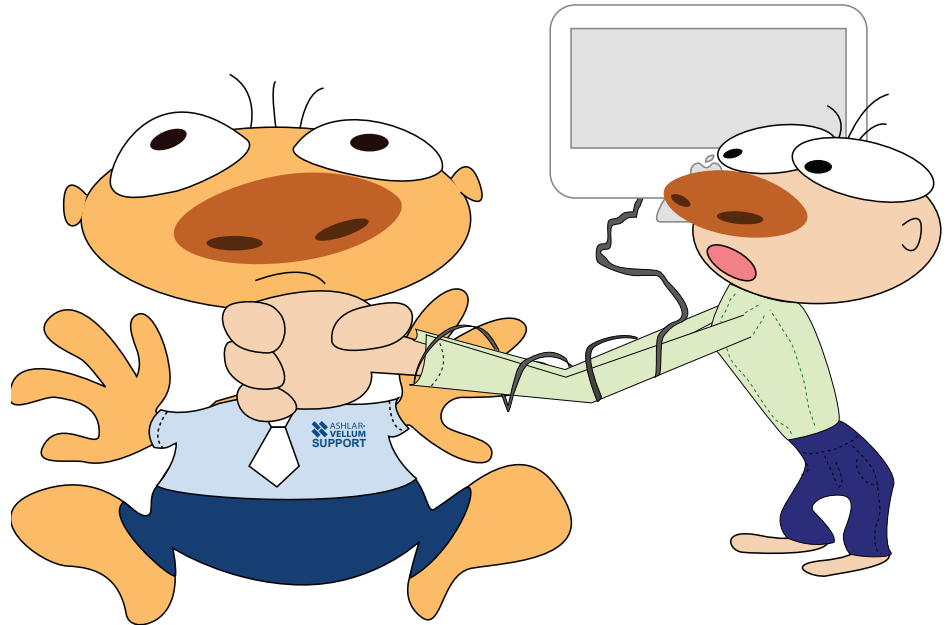
Your Specific Setup

The settings and configuration of your personal system, network or other setup may be causing you grief while using Ashlar-Vellum software. This could be related to your hardware configuration, the characters used in your file names, and how often your software is updated. We'll explore each of these further.
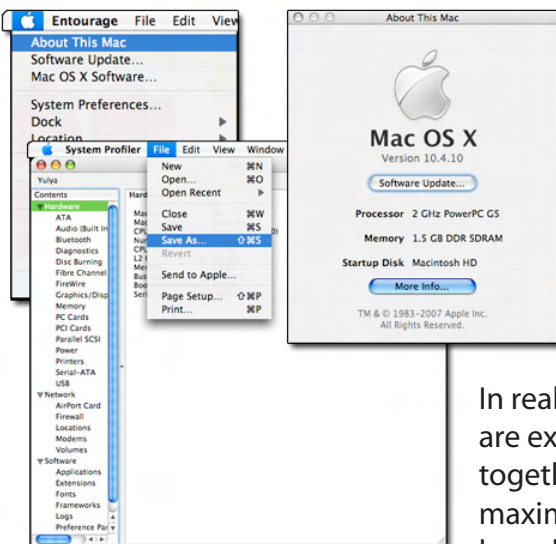
System Configuration

Problems that manifest themselves while using Ashlar-Vellum software could be related to the various graphics and network driver revision levels, the kind of file system on the hard drive you're using, or your network protocols. It is extremely helpful to send us complete information on your system. Instructions for doing this on each platform follow.

Continued...

Mac System Info

1. Click on the **Apple icon** in the upper left corner.

2. Go to **About this Mac**.

3. Click the *More Info...* button.

4. In the System Profiler use **File>Save As** and save the information as a plain text file. Be sure to **include your name** and operating system as part of the file name.

Windows System Info

1. Follow **Start>All Programs> Accessories>System Tools>System Information**.

2. Then use **File>Export** to save a text file **with your name** and operating system as part of the file name.

File Names

File names also present a number of problems. Anything other than a-z and 0-9, can break file names and paths. Upper and lower case characters may cause unpredictable results on various systems. Extended character sets used in most languages other than English, are handled differently by different applications, file systems, desktop operating systems, network operating systems and network protocols. Individually, applications, file systems, operating systems, protocols and network operating systems all say they support paths of over 2000 characters. In reality, when all these things are expected to work in concert together, sometimes the maximum is only 230 characters, based on some parameter, set by somebody, somewhere.

Isolated Systems

Computers that have been specifically isolated from the internet for security reasons cause our users major headaches because they are not regularly running system updates to keep current with driver, operating system and other updates. Because of technology advances we must sometimes become incompatible with old systems in order to support current ones. It is imperative that you connect your system to the internet at least quarterly for system updates. Getting timely update CDs from Apple or Microsoft is neither expedient nor inexpensive.

Also, it is important that your system be connected to the internet in order to receive our support emails and to participate in screen-sharing sessions when necessary. This is discussed further on in this article.
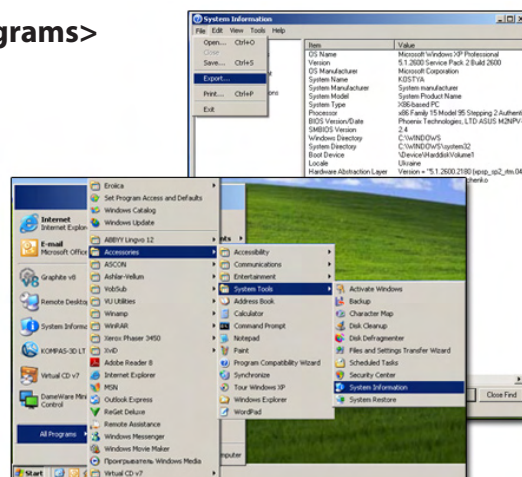
Help Us Understand

When we can't reproduce a problem you can bet money that it is not a common problem that everyone else is having. So how can you help us see it?

In addition to a complete description of the specific problem or function that is not working, it is incredibly helpful to attach a screen shot, movie, translation or source file for us to see.

Continued...

Screen Captures

Grabbing a quick screen shot of dialog boxes, the drawing area, the warning message, the cursor or whatever is the offending issue can be enormously helpful to our team. Even when you've carefully articulated exactly what the problem may be, if just one detail is left out the issue may not be visible to our team. A screen capture shows enormous details that are difficult to write in an email.

To make a screen capture on a Windows system:

1. Press the **Print Screen** button. This saves the screen to the clipboard.

2. Open Paint (included free with Windows) using **Start> Programs>Accessories> Paint**.

3. Paste the screen capture into the document.

4. Use **Save As** and save it with a meaningful file name, including your name and operating system.

On the Macintosh:

1. Use **Apple Key+Shift+3** for the whole screen, or **Apple Key+Shift+4** to drag the mouse across and capture a specific screen area.

2. This saves a numbered PDF file to your desktop with a filename such as *Picture1. PDF*.

3. Rename the file with a meaningful file name, including your name and operating system.

When emailing a screen capture DO NOT simply paste it into an email. Most graphics pasted into the body of an email cannot be interpreted on anything but your own system. Follow the rules in the section below on how to email a file.

Drawing Source and Log Files

When you're experiencing difficulty with a system crash, it is imperative that you send a drawing file to us. In addition, starting with v7 of Cobalt, Xenon and Argon and v8 of Graphite, all programs generate a crash log file that can be easily sent to our support department. With the help of the log, the detailed steps that led to the crash, and the drawing file you were running prior to the crash, we are usually able to provide both a timely work around to the problem and later, a full software

solution. Follow the rules in the section below on how to email a file.

Translation Files

The single biggest frustration occurs when customers email us reporting a problem with file import or export but do not attach the files for us to look at. Whenever possible, please send us all of the following:

- The native file in which the data was created.

- The intermediate file and format from which you've received or sent the data.

- A screen capture of the result.

- The goal you are trying to achieve by using the translated data.

Translation problems are absolutely specific to the software and system on which they are created, the contents of the file, the other software you're trying to translate to or from, and various other factors. Without the offending files we haven't the first clue what's wrong with your result or where to begin to solve the problem.

For example, you may be trying to import data created in an older version of Catia into Graphite using a file sent to you by a colleague that was printed as a PDF and converted in Acrobat to an EPS file. Depending on your goal, the EPS file may or may not be appropriate. If you simply want to use the data as a graphical element, EPS should be fine. On the other hand, if you want to edit the data or interface with a milling machine, an entirely different file format is necessary.

What you get in Graphite from this EPS file may be very different than what we see on the screen when we import it because of your system settings, etc. By sending us a screen capture we see what you see. With that, plus the source and intermediate files, we have a good chance of finding where the problem lies when you tell us your goal. Follow the rules in the section below on how to email a file.

For more information on file translation, see the articles on our website at http://www.ashlar.com/sections/support/articles/articles.html.

Movie Files

Another great way to communicate a problem to us is to capture it in Cobalt, Xenon or Argon using **Animation>Record QuickTime**. With this we can follow exactly the steps you took to encounter the problem. For Graphite, third-party software such as Screen Recorder Gold for Windows or Screen Movie Recorder for Mac are both available for under US $30. Movie files are fairly large so be sure to follow the directions below for emailing them to us.

How to Email a File

To send us a file, be sure to do the following:

1. Put a meaningful name on the file. *Picture14* does not allow us to know the customer, the operating system, nor the issue.

2. Make certain that the file has a file extension appropriate to the file. **MAC USERS, THIS MEANS YOU**. If it's a screen capture, it could be a PDF, JPG, GIF, PICT or BMP. If it's an Ashlar-Vellum source file it could be VC6, CO, XE, CO AR, VS or VLM. If it's a file you're trying to import it could be a DXF, DWG,

SAT, IGES or something else. Whatever the file type, be absolutely certain that the file extension is included. Without it the file may not transmit reliably through email and will be unintelligible when it arrives.

3. Send the file as an *attachment* to an email. Don't just paste it in the body of the email where most things turn to text.

4. While our email system handles files up to 15 MB in size, it is good standard operating procedure to zip or archive large files before emailing. On Windows use the built-in ZIP utility or install WinZip. On Mac, right click (or CTRL+click on a one-button mouse) and select Create Archive from the menu. Files that are compressed using these programs are encased in such a way that the email system can check them for transmission integrity across platforms and systems.

Continued...

ASHLAR·VELLUM™
Software that works the way you think.

5. If your zipped file is greater than 15 MB either submit a ticket to support@ashlar.com requesting instructions for using I-DISK or use the free service at www.yousendit.com which allows you to upload a copy of your file to their private site and send us notification with the instructions for downloading it. Files are available for seven days. (This is also a great way to exchange large files with clients and colleagues.)
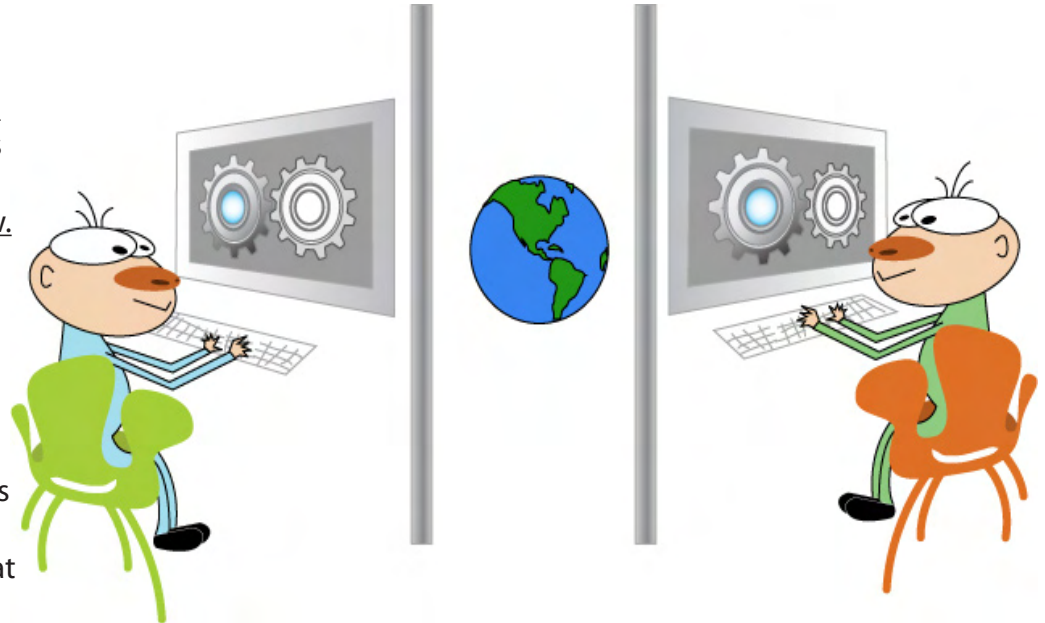
Screen Sharing

There are times when a problem just can't easily be solved through email or even the telephone. At those times, a screen-sharing session may be recommended by our support team using a program like Acrobat Connect. This allows us to see the problem first hand. It also allows us to fix things on your system that are incredibly difficult to walk through with someone on the telephone.

Service Initiation and Costs

All support actions MUST start with a support ticket. Without a ticket number it is impossible to track issues effectively and find problems when email communications are blocked through ISPs and junk mail folders.

To start a support ticket send an email to support@ashlar.com or go to our website at www.ashlar.com and follow **Support>Support Center** and click Submit a Ticket.

Costs for Ashlar-Vellum technical support services are on the right:

	Email	Phone/Screen Share
Purchased/ Shipped in Past 90 Days	Free	Free
Current Version	Free	US $39
One Version Back	Free	US $39
More than One Version Back	US $29	US $39

Right the First Time

When a customer says, "I need it yesterday," they can only be joking, or can they? One Friday morning at Quigley Design a customer called asking for a rapid prototype to be delivered in a few days. The customer wanted to assemble the prototype, including the printed circuit board and other components, in front of the decision makers in a meeting.

"Fortunately we knew the project well and had produced a series of concepts by this stage," said Kevin Quigley, of Quigley Design, "but the problem was that the required prototype was a completely new design—and we only had a day to model it!"
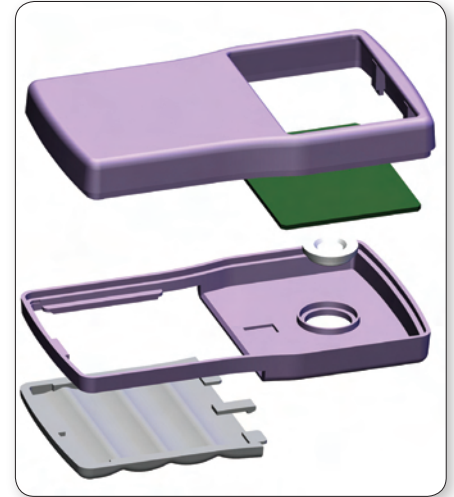
Working directly from the customer's AutoCAD DWG layouts for the PCB display configuration and envelope, the basic enclosure form was created with some additional detailing in the handgrip area. Then this was sent off for approval as a series of photorendered views produced directly from Cobalt™.

A customer called on Friday morning and asked for a rapid prototype to be delivered to a meeting the following Monday, where the PCB and other components would be assembled in front of the decision makers.

> *"I always make sure that the parts are modeled with draft—which is easy to do in Cobalt— so that the basic form is manufacturable."*
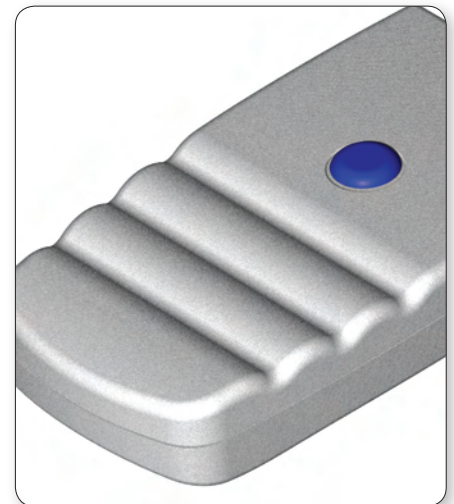
After getting the go ahead, the basic form was split and shelled, then internal details were added, such as ribs, location pillars for the PCB, screw bosses, and even a snap fitting battery cover.

By 4:30 the parts were complete, converted to STL (using Cobalt's built-in STL export translator) and e-mailed off to the prototyping bureau for building over the weekend.

A couple of days later the parts arrived, on schedule, at the meeting—and all the components fit together. "To say I was relieved was an understatement," said Kevin, "but the job was done and everyone was happy—so much so that they decided to chance the design!"

Background/Contact:

For more details on this project contact:

Quigley Design
Westgate House, Hills Lane,
Shrewsbury, Shropshire, SY1 1QU

Phone: +44 (0) 1743 231661

E-mail: kevin.quigley@kqd.co.uk

A Sweet First for Starbucks

When David Ryan took on the assignment to create a design for Starbucks' new line of chocolates, he knew it meant coming up with a shape that was recognizably Starbucks. It had to convey a kind of sensuous, playful whimsicality that people associate with the premier purveyor of coffee and coffee culture.

Starbucks planned to develop an entire family of chocolates. Not all the pieces were to be identical, but they were all to be identifiable as part of the Starbucks chocolate family. This requirement added to Ryan's challenge. He had to create a uniquely whimsical, playful design from which he could spin off a range of shapes that would be patentable.

When Starbucks asked Ryan to take on the chocolate project, he chose Ashlar-Vellum™ Cobalt™ to come up with the basic form for the chocolates—a 3D abstraction of the letter S. Once Starbucks agreed upon the design, Ryan modeled the shape in the software. He stated that one of the big advantages of using the Cobalt solid modeler is the program's mass properties function.

> ***"With the solid model I simply supplied the program with the specific densities of the chocolate and let it determine the weight automatically. Increasing or decreasing the weight was done by altering the geometry."***

Ryan also praised the program's ability to make rapid prototypes. The California company that makes foil pieces for wrapping the chocolates and the German company that makes the candy molds worked directly from Ashlar-Vellum files to complete their parts of the project. This, of course, significantly reduced the time from design to finished product.

Ryan summed it up by saying, "Although it was a first for everyone involved, the use of CAD and related technologies to create chocolates turned out to be a very tasty experience."
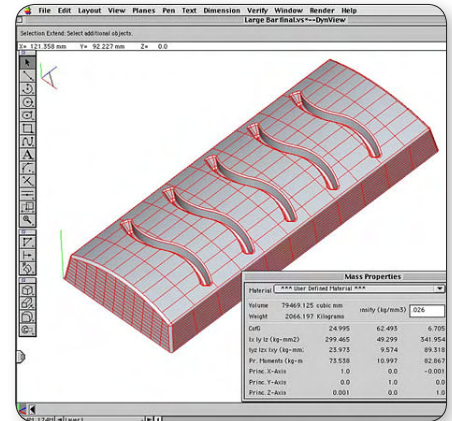
Ashlar-Vellum's flexibility meant designer David Ryan could let his imagination run, but when it came time to get these chocolates made, wrapped, and at a Starbucks near you, Cobalt had the power to finish the job.
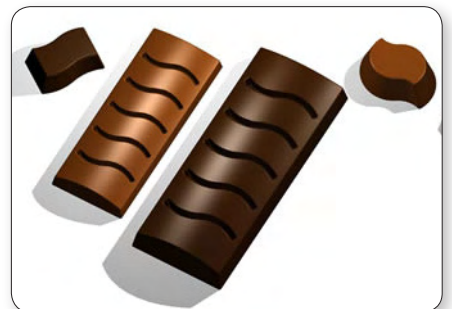
The signature 'S' design for Starbucks.

Background/Contact:

For more details on this project contact:

David Ryan Design Offices
1061 25th Avenue E
Seattle, WA 98112
Phone: +1 (206) 328-4103
E-mail: davidryan@seanet.com