

The Design Explorer

The Ashlar-Vellum User Newsletter

Second Quarter, 2007

Graphite™ v8 Released

Graphite v8 was released March 28, 2007. Customers who have pre-ordered their upgrade to Graphite v8, or to Cobalt or Xenon v8 which includes a courtesy license to Graphite, should have received their serial numbers, registration codes and a download link. If you did not receive this it is possible that you have changed email addresses



or our email has been blocked. Please contact us at customer.service@ashlar.com with your contact information.

CDs have been shipped to those who ordered full materials. If you ordered a CD with your upgrade and did not receive it, please send an email to customer.service@ashlar.com. Include your serial number and contact information.

Open Beta for Cobalt™, Xenon™ & Argon™ v8

In an unprecedented move, Ashlar-Vellum has opened beta testing of Cobalt, Xenon and Argon on certain platforms to the public. Both current and potential customers can download and run the software. Customers who have upgraded to v8 can use their permanent codes. Prospective customers and those who are on a previous version must receive a two-week trial beta registration code from us.

Cobalt, Xenon and Argon are all available for the Windows platform for XP or Vista. For the Mac Power PC, Xenon and Argon are both available, but not Cobalt. The Mac version will also run successfully on the Intel Mac. Mac customers with a Cobalt v8 serial number can use it to run Xenon v8 temporarily until Cobalt is in beta on Mac.

See page 8 for a complete list of new features and benefits

found in each product, plus indications of what's still to come in the free service pack 1.

Open Beta Versions Available for v8

Windows	Cobalt Xenon Argon
Mac Power PC (Works on Intel Mac)	Xenon Argon

Crash on Launch Bug Smashed

The crash on launch bug which has recently plagued about 50 Ashlar-Vellum customers has been exterminated in all its mutations and the fix is now being compiled into upcoming service packs and hotpatch releases. Graphite v7 SP3 is the



first to be released this month with the fix. Graphite v8 SP0 Hotpatch 3, and Cobalt, Xenon and Argon v7 SP2 Hotpatch 4 will be released with the fix in mid July.

Need Help? Try these Options

Ashlar-Vellum offers a range of free and paid technical support through email, telephone and our website. The Knowledgebase on our website as well as the Articles under the Support menu are an excellent place to look for commonly asked questions.

We have also implemented an online ticketing system for interaction with our tech support staff. This has several advantages to our customers. First, it provides an organized place to view all correspondence related to a ticket. This can be done by both customers and our support staff through our Support Center. Second, it establishes a quick communications link that is especially helpful for:

- Communicating long filenames, download links, and registration codes, all of which are impractical and error-prone to deal with over the telephone.
- Establishing an electronic link needed for sharing screens through Acrobat Connect should an issue need to be elevated to this level.
- Allowing not only all of our support team, but also product management, corporate management, and development to monitor issues and offer additional advice.

Please note that all interaction with our support staff, either through email or telephone, free or charged-for, requires a support ticket number. Each new issue will need a new support ticket. Calling without a ticket will not result in getting faster service via telephone.

Our goal is to respond to, *though not necessarily resolve*, your question within four business hours (Monday-Friday 9am-3pm Central Time). Tickets received immediately after a product or service pack release may take a little longer.

Free technical support is available via email to those on the current version or one version back. Paid email support for older versions is available at US \$29 per issue.

Free telephone callbacks are available to those who have received a new license or upgrade in the past 90 days. Paid telephone support is available for those outside of 90 days and for those requiring special consulting services as outlined in this article.

Free Knowledgebase

Take a quick look through our knowledgebase for useful tips and answers to our most frequently asked questions on how to do any number of things. Just click *Have a Question?* on our home page.



Getting a Support Ticket

All technical support activities from ALL customers require a support ticket. A ticket can be obtained in any of the ways outlined on the following page. All submissions will receive an acknowledgement via email within 20 minutes. If you do not receive this acknowledgement with your ticket number, check your junk mail folder.

Continued...

Free Ticket Creation

Tickets to initiate a support activity may be obtained free of charge from our website or via email. A support ticket does not necessarily entitle you to free support. Eligibility for free versus charge-for support is outlined further down in this article. To submit a ticket at no cost and receive a number initiating a support event, either:

- Go to our home page at www.ashlar.com and click on *Need Help?* Fill out the convenient form. Attach a troublesome file as necessary.



- Send an email to support@ashlar.com. Be sure to include your serial number, operating system, full contact information and a description of the problem. You can also attach a troublesome file for us to examine.

Convenience Ticket Creation

If you cannot immediately access the internet, Ashlar-Vellum will be glad to submit a ticket for you for a charge of US \$10. You must have access to email, however, to receive the full benefit of our support.

Email Follow up

Once your ticket number has been created it will be evaluated for free vs. charged-for support. You will then receive another email stating that you either qualify for free service or with instructions on how to use your credit card to purchase a support voucher over the website or via telephone.

Free Email Service

Free email support for an existing ticket is available for those with the current version or one version back who have created an existing ticket. Response to support tickets can usually be expected within four business hours.

Charged-for Email Service

Email assistance is available for those who are not on the current or immediately past version for US \$29 per issue. After purchasing a support voucher, response to your support ticket can usually be expected within four business hours.

Telephone Assistance or Call Backs

Most support tickets will be handled through email. This will be the initial point of contact. If necessary, telephone contact and follow up will be used to help resolve an issue elevated to the next level.

Users who call Ashlar-Vellum without a support ticket will be charged US \$10 to create one for them. This support ticket will then go through the standard free vs. paid-for evaluation process.

Free Phone Service

When necessary, free telephone call-backs for existing tickets are available for any of the following:

- Those who have purchased a new license or upgrade within the last 90 days or whose pre-purchased release has shipped within the past 90 days, whichever is later.
- Those with past versions in which the focus of the conversation is limited to whether or not upgrading to a new version will solve their problem.

Response to your support ticket can usually be expected within four business hours.

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Charged-for Phone Service

Telephone assistance is available when necessary to those outside the 90-day window, or for those on active rental contracts for US \$39 per issue with an existing ticket. After purchasing a support voucher, response to your support ticket can usually be expected within four business hours.

Additional Support Services

The following services are available through our Quick Start Consulting Services, arranged through our sales office.



Emergency Support

Emergency technical support for all users is available through our Quick Start Consulting services at US \$150/hour. Contact the Ashlar-Vellum sales office to see when

a consultant is available.

Reinstallation Assistance via Telephone

If you require help reinstalling current software after purchasing a new computer, the consulting charge is US \$35 per computer. For assistance installing legacy versions of our software on new hardware the consulting charge is US \$150/hour and we only guarantee results if the computer exactly meets but does not exceed the specifications for that version of the software.

File Import/Export Service

Detailed information on file translation issues is available on our website under **Support>Articles** as well as in the knowledgebase. If you would like Ashlar-Vellum to perform the translation service for you, the charge is US \$35 per file.

Program Tool Assistance

Assistance with learning to use a properly functioning tool falls into the category of training and may be obtained through our web conferencing system at US \$150/hour.

Project Consulting

Our Quick Start Consulting is a great way to get some specialized help with a project. This is available for US \$150/hour.



Hardware Key Reprogramming

Versions of our software purchased at or before the turn of the century required a hardware key. While a highly experienced IT staff can sometimes get these old versions to run on new hardware, it is usually least expensive to simply upgrade to a current version that does not require a key. Ashlar-Vellum does provide services to assist your staff in key configuration. It requires a US \$295 charge to reprogram the key, plus a minimum of two hours of Quick Start Consulting at US \$150/hour if we can connect directly and take over your system via high speed internet. It requires three hours or more if we must talk you through this over the telephone. Contact Ashlar-Vellum sales for upgrade pricing to assist in your decision or arrange for a consulting appointment.

Old Software on New Operating Systems

Here are a few things you should know about legacy software:

Vellum 2.7:

- Vellum 2.7 will NOT run under Microsoft Windows Vista. Version 2.7 is a 16-bit program and Vista demands 32-bit applications.
- Vellum 2.7 will NOT run on the new Intel Macs.
- Because Vellum 2.7 is over 10 years old, the upgrade discount from 2.7 to Graphite will be discontinued on July 31st, 2007.

Upgrade from Vellum 2.7 Discontinued

The deadline for upgrades from Vellum 2.7 and earlier has been extended to July 31st, 2007. As of that date, upgrades from Vellum 2.7 and earlier will no longer be available. Since this software is over 10 years old we will not offer upgrades to the current software at a discounted price. If you are still using Vellum 2.7 please upgrade to Graphite v8 now while you can still do it for US\$695 rather than US\$1495 later.

Therefore, if you have plans to upgrade your hardware running Vellum 2.7 anytime in the future, **upgrade to Graphite v8 now for US \$695** or you'll have to pay the full retail price of US \$1495 later.

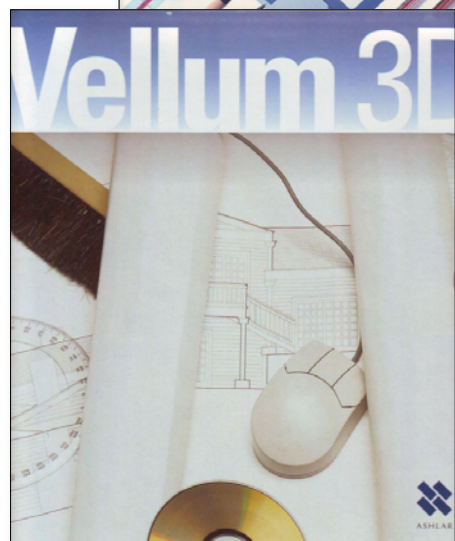
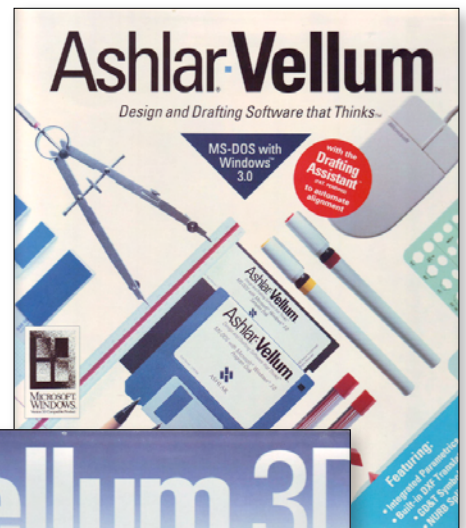
Vellum 3.0, 4.0, or 99, Vellum Solids 98, 99, 2000:

- These will NOT run on the new Intel Macs.
- To get an old hardware key running on a new computer under Microsoft Windows Vista usually requires Ashlar-Vellum specialists to log into your computer and set up the drivers. We are happy to help with this under our Quickstart Consulting program at US \$150/hour. It usually requires a minimum of at least two hours, sometimes longer.
- New computers no longer have parallel ports for Windows machines nor ADB ports on Mac.
- Commercial products that convert parallel or ADB ports to USB do not work for software security keys.
- To purchase a new USB key with an old serial number and information is US \$295.

The cost difference between the consulting fee with key replacement, and the upgrade price of US \$695 is not significant enough for most people to go through the inconvenience of trying to get their old software running on new hardware.

Graphite v6, Cobalt, Xenon & Argon v5

- These will not run on Intel Macs because OS 9 is not supported on those machines.



New Faces, New Positions at Ashlar-Vellum

Michael Dyrda, New Product Manager

Michael Dyrda has recently been promoted to Product Manager. Over the past year Michael has shown real leadership in the development of our products and the initiative to not only include new features, but more importantly, to make them function in the Vellum way.



Michael Dyrda



Michael Urisman

Meet Michael Urisman

Michael Urisman joined our technical support team this month. He has a degree in engineering technique and experience in both design and production engineering using a number of CAD systems including T-Flex, a Russian parametric modelling program.

Meet Nisha Patel

Nisha helps out with IT, tech support and sales from our Austin office, where she's recently moved from Minnesota. Nisha has excellent experience with software applications on both Windows and Mac platforms and has managed large computer labs.



Nisha Patel

Using Cobalt, Xenon and Argon on Mac Intel Machines

Our development staff is diligently working to create native universal binary versions for the Mac to run on both the PowerPC and Intel platforms. This issue affects every graphics software producer in the world. It is not just Ashlar-Vellum who is wrestling with this issue. The universal binary will be part of the upcoming v8 for Cobalt, Xenon, Argon and Graphite v8 SP1.

Recent optimizations on Rosetta, Apple's free emulation software that comes with the Intel Mac, now allow the 3D modelling

products to run with reasonable performance on OS X 10.4.9 using the Intel Core 2 Duo and Xeon processors. When the emulator is functioning properly, speeds are about one third of what can be expected when our software is implemented natively as a universal binary or is running under Boot Camp. On a 2GHz machine, this is the equivalent of an old 867 MHz processor of about 3

years ago. Many complex Cobalt files were run successfully on that processor. When Rosetta is



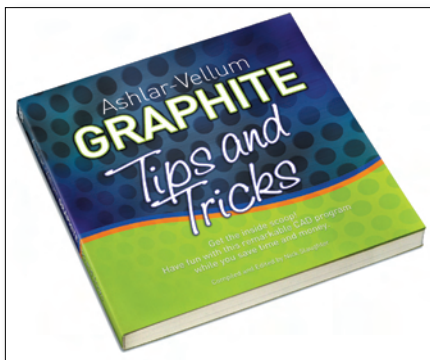
not running properly it will be immediately obvious because it will take several seconds just to select an object, particularly if the Design Explorer History Tree is open. There is no obvious reason why Rosetta runs properly on some machines and not others, but Ashlar-Vellum will continue to investigate the issue.

Focus on Ashlar-Vellum Accessories

Ashlar-Vellum offers great accessories for use with Graphite or with Cobalt, Xenon and Argon.

Graphite Tips & Tricks

This is the power-users' guide for all kinds of insider information saving loads of valuable time for both new and experienced users. Designed for both Mac and Windows users, this spiral bound book retails for US \$49.



Vellum:tracks

Now you can have royalty-free soundtrack music for your 3D animated movies using Vellum: tracks. Thirteen original tracks provide a wide variety of musical styles. Using any audio editing program, the tracks can be edited to the appropriate length and dropped into your movie. Retail price: US \$100 with CD. Click on the link below and listen: <http://www.ashlar.com/sections/products/vellum-tracks/images/Track-03.mp3>.



Vellum:environments

This set of 15 virtual photography studios provides an easy starting point for fast 3D renderings. The studios' large, smooth surfaces are pre-lit for easy modification. A full-color book offers easy step-by-step instructions for great renderings and trouble-shooting. Retail price US \$100 with colour book and

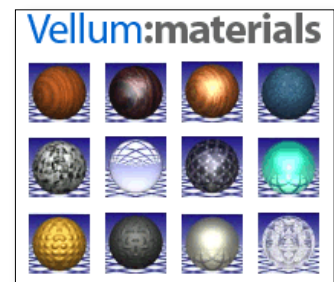


CD.

Vellum:materials

This collection of surfaces and finishes cuts the work involved in preparing a model for rendering. Materials are available for anything designed in Cobalt,

Xenon or Argon. The collection includes ceramics, metallic paints, plastics, metals, fabrics, woods, leather, glass and more. Retail price US \$100 with CD.



Vellum:decals

Choose from over 300 commonly used decals when rendering computer-generated objects such as AV, computers, digital, hazard, keyboard, recycle, shipping, signage and telephone. Retail price US \$100 with CD.



Site licensing is also available for software accessories. See our website at www.ashlar.com for more information.

Cobalt, Xenon & Argon v8: Features, Benefits & More




Anticipated Summer 2007

All features are subject to change without notice prior to version release. Those features indicated SP1 are scheduled for the free Service Pack 1 update.



Feature	Benefit	More	v8	Xe	Ar
Conditional equations	More complex and intelligent geometric constraints.	Add if-then-else statements to the parametric constraints bounding the upper and lower limits. For example, currently a sketch could have the dimensions $D2=D1x3$. If the maximum constraint is 20 and the minimum constraint is 1, in v8 a conditional equation could be written: <i>If $D1x3 \geq 20$ then 20 else if $D1x3 \leq 1$ then 1 else $D1x3$.</i> This bounds the dimension at 1 and 20.	Co		
Nested equations	Equations can now reference other equations for more robust equation-driven parametrics.	The results of one equation can be used in multiple other equations.	Co		
Variables allowed in Status Line and Edit Object fields	More robust parametric equations.	Nearly any parameter can be an equation.	Co		
Real-time section profiles and cutaway views in edit window SP1	Facilitates design inspection and verification.	This is a viewing tool that is seen live in the edit window without requiring copying and modifying of the model using the trim tool as was done in v7.	Co		
Enhanced rib tool	Covers more cases.	More robust tools handling a number of special cases.	Co		
Photo-rendered model-to-sheet views	Better client presentations. Photoshop composites not necessary.	Any number of views can be photo-rendered and composited with the line work as desired.	Co	Xe	
Non-photo-realistic sketch rendering for stills and animations SP1	Increased client interaction during design presentations.	These stylized, artistic effects for stills and animations help convey conceptual intent of the design. They are particularly useful for communicating particular stages of the design process.	Co	Xe	
Real-time environment maps in edit window	Interactive feedback on surface aesthetics.	Environment maps can be used to interactively evaluate curved surfaces in real-time rather than waiting for the scan-line rendering used in v7.	Co	Xe	




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Feature	Benefit	More			
Courtesy copy of Graphite v8	Compatibility with other Ashlar-Vellum Graphite users.	New features in Graphite v8 include: <ul style="list-style-type: none"> • Mid-point Line Tool • An Updated User Interface • Resizable Dialog Boxes • Tear-off Tool Palettes • Dockable Tool Palettes • Spacebar Pan • Universal Binary Support for the Intel Mac • Support for File Names Over 32 Characters Long • AutoCAD 2007 DWG/DXF Support • Direct, Multi-sheet PDF Creation with Optional Imbedded DXF Export • New Installer • Pen Style Palette • Eyedropper Tool 	Co	Xe	
Real-time pseudo zebra in edit window	Interactive feedback on surface aesthetics.	Zebra surface checking, can be applied to an entity without going to a separate mode or waiting for a scan line rendering. Use the Edit Object box or right click to apply the verification method.	Co	Xe	Ar
Real-time normal, curvature & draft check in edit window SP1	Interactive feedback on surface aesthetics.	All surface checking, including normal, curvature and draft check displays can be applied to an entity without going to a separate mode or waiting for a scan line rendering. Use the Edit Object box or right click the mouse to apply the verification method.	Co	Xe	Ar
Real-time display in 3D of imported scanned hand sketches or other images	Significantly easier trace-overs.	Sketches stay while tracing in real time.	Co	Xe	Ar
Direct support for imprinting profile sketches onto surfaces and solids to create surface subdivisions	Saves five steps.	One click not five to imprint a sketch on a surface.	Co	Xe	Ar
Advanced control of antialiasing for objects, edges, shadows and reflections	Fine control of renderings.		Co	Xe	Ar
Independent control of reflections and refractions	Finer control of renderings and improved rendering speeds available using lower settings.		Co	Xe	Ar




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Feature	Benefit	More			
Accelerated Phong and Gouraud shading options for fly-by and walk-through animations	Significantly faster rendering for path verification prior to final high quality rendering.		Co	Xe	Ar
Accelerated Phong and Gouraud shading options for render to file	Super fast render to file when photo-realism is not required.		Co	Xe	Ar
Enhanced Shade Now shortcut	Fast access to your favorite photo-realistic or shading options.	Includes photo-realistic rendering option.	Co	Xe	Ar
Photo-realistic environment maps for stills and animations	Less set-up time for renderings.	Quickly creates a simple six-sided image as an environment reflecting the surroundings of a model, without introducing a new object in the model.	Co	Xe	Ar
Photo-realistic sunlight (from location and date/time) for stills and animations	Easier light and shadow studies for architectural design.	Rather than setting up a static light pointing at a model, this calculates the position of the sun given the latitude, longitude, date and time, revealing shade and exposure throughout the year.	Co	Xe	Ar
Photo-realistic fluorescent lights and area lights for stills and animations	Improved realism of photo-realistic renderings.	This generates a diffuse tube of light with the proper geometric pattern and colour temperature.	Co	Xe	Ar
Optionally include wireframe geometry in photo-realistically rendered stills and animations	Easily allows engineering and artistic elements to be mixed in final rendering.	User configurable. Frequent user request.	Co	Xe	Ar
Enhanced select and transform tools directly move faces and edges in solids without using the specialized local face tools	More interactive modelling.	Direct transform and array faces, edges and features in solids without using specialized local face tools. Grab and move a face or collection of faces using the selection or move tool.	Co	Xe	Ar

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Feature	Benefit	More			
Photo-realistic material changes displayed in real time in the edit window	Saves hours of time during photo-realistic rendering refinement.	Changes display in real time without the inconvenience of using a modal dialog box.	Co	Xe	Ar
Import and Export of bitmapped images	Easier use of bitmapped images.	Previously must copy and paste or render to file. Now use the import/export dialog box.	Co	Xe	Ar
Imported bitmaps support alpha channel	Enhances visual effects.	Easily allows pixel by pixel transparency to be set for bitmaps.	Co	Xe	Ar
Enhanced Spacemouse-device support to include Mac (previously on Windows) SP1	Enhanced productivity and comfort for 3D modelling with this high performance motion controller.		Co	Xe	Ar
Spherical duplicate tool	Saves time creating patterns.	Automatically created. Associative in Cobalt and Xenon.	Co	Xe	Ar
Cylindrical duplicate tool	Saves time creating patterns.	Polar duplicate with levels. Automatically created. Associative in Cobalt and Xenon.	Co	Xe	Ar
Enhanced Polar duplicate tool	Saves time creating patterns.	Now automatically duplicates multiple rings.	Co	Xe	Ar
Multiprocessor photo-realistic rendering and animation on Mac OS X SP1	Dramatically decreases rendering time by dividing across all available processing cores.	This was previously supported on Windows only.	Co	Xe	Ar
Direct, multi-sheet PDF creation with optionally embedded source and exported files	Facilitates accurate archiving, emailing and communication of CAD files.	Create PDFs directly from within the program and embed native Ashlar-Vellum files along with DXF, SAT, STL and other useful formats in the file. PDFs email reliably without changing to text. They accurately reproduce fonts, line styles and patterns. Ashlar-Vellum and other CAD files allow future manipulation of data.	Co	Xe	Ar
Optional automatic view scale indicator	Reduces errors.	Automatically adds scale to layout as a text element with the view names reducing confusion among different scaled views.	Co	Xe	Ar
Updated ACIS, STEP, IGES and Catia Translators	Greater cross-industry file compatibility.	Updated to Spatial's Interop v16.	Co	Xe	Ar
Batch convert tool	Easier file compatibility.	Convert tool in the file menu converts entire folders of files to import or export file types.	Co	Xe	Ar

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Feature	Benefit	More			
AutoCAD 2007 DXF/DWG support	Enhanced interoperability.		Co	Xe	Ar
Enhanced import/export dialog box featuring target and source software by product name	Makes instantly obvious the best format to communicate with different software.	Click the tab to switch between a list of source programs or a list of file formats to more easily choose the correct translation.	Co	Xe	Ar
Updated interface with tear-off and dockable tools and palettes SP1	More comfortable, customized workspace for greater productivity.	Click on the dotted line to “tear off” the menu, then resized it and drag it to a convenient location. The menu stays open, ready to use, until the box is clicked to close it. Especially useful for the Verify, Planes, PhotoRender and Edit menus.	Co	Xe	Ar
Layers optionally override pen properties	Better compatibility with AutoCAD.	Alternative way of controlling pen properties.	Co	Xe	Ar
User-definable interface skins	Customizes icons and colour schemes.		Co	Xe	Ar
User-definable texture library locations	More control of where textures are stored.	Create a user library location in addition to the system library locations.	Co	Xe	Ar
Simplified menus for Text and Dimensions font and size selection SP1	Fewer mouse clicks.	Consistent non-modal dialog boxes and a pull down menu facilitate font, size, style and other features for both text and dimensions.	Co	Xe	Ar
New installer	Easily check that the latest version is installed. Compatible with higher security of today’s operating systems.	Quickly check to see if a new update is available from the website, then download and install just the update, not the entire program. This allows: <ul style="list-style-type: none"> • Keeping designated Preferences • Keeping registration code in place • Quickly installing patches • Downloading smaller files • Updating software with less effort 	Co	Xe	Ar
Universal binary support for Intel & Power PC Macs SP1	One version natively supports all OS X Macs.		Co	Xe	Ar

Lounging in Luxury



Award winning designer Mark Robson has received world recognition for his luxury designs of indoor and outdoor furniture.

Born in Hertfordshire, England, Robson lives and works in Lovagny, France, not far from the borders of Switzerland and Italy. As a freelance furniture designer, his talents have been sought by some of the top luxury furniture companies around the world including Bemis Manufacturing, Faversham Furniture Group, Flair, Fiell Gallery, Geromeubles, JLS, Sifas, Scab and Zanotta.

Robson started designing in 2D on the Mac using Ashlar-Vellum's DrawingBoard™ in the early 90's. When he decided to make the move to 3D several years ago, colleagues advised him to switch to a PC and buy Rhinoceros. Robson, commented, "I know designers who needed to go back to school to learn how to use Rhino! Staying with Mac narrowed my choices, but I had confidence in Ashlar-Vellum and have no regrets with Argon™."

Most recently, Robson designed the Kolorado furniture range for Sifas, a French furniture company, and leader in the *In-Out Attitude* of home furnishings. The *In-Out Attitude* seeks to abolish boundaries, making it difficult to determine where the house ends and the garden begins. The Kolorado line includes a chair, lounge, low table and stool.

Robson used Argon for everything including conceptual drawings, initial prototypes, modifications and detailed plan drawings for industrial prototypes. He even created animated Quicktime VRs of furniture before manufacturing.

"The seemingly simple, curved-slat surface of this furniture range would have been difficult to calculate precisely without easy-to-use 3D software like Argon. Each central slat is identical."

The furniture met with great success at it's launch at the *Maison et Object* exhibition in Paris. Much of the pre-sales communication used photorealistic renderings done in Argon.

Robson continues designing furniture in Argon for both commercial collaborations and his own personal experimental research in his quest for innovative design ideas.



Robson's Kolorado Lounger uses central slats of identical size, calculated precisely in Argon.



Testing the design during prototyping.

Background/Contact:

For more details on this project contact:

Mark Robson

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74330 Lovagny
France

Phone: +33 6 88 13 67 52

E-mail: markrobson@wanadoo.fr

Website: www.markrobson.fr

Optimizing the Optima



One of the moments every designer dreads is when they have to show a new customer their first design concepts. In the case of the Optima Mug, this was simply not an issue.

The Optima Mug is the latest product to be introduced by Village Mill, a family-run UK-based manufacturer of business gifts and accessories. Village Mill presented Kevin Quigley of Quigley Design (a product development business) with a very tight technical brief for a new designer mug.

The Optima was designed from the start to be the flagship product for Village Mill. "Part of our brief was to create a well designed product that was also optimized for molding, so this meant working very closely with the customer to ensure that both the aesthetics and the technical issues were satisfactory."

After presenting some initial shapes, Quigley Design invited Village Mill to participate in the design process by using the CAD station to work through subtle aesthetics.

"I like to work interactively with my customers. One of the ways we can do this is by using the powerful associativity in Cobalt."

"Throughout the development of the Optima Mug we used this approach, tweaking the CAD model, switching to the linked drawings to check wall thicknesses, and then switching to a pre-saved perspective view and rendering the mugs. In this way, the customer could see not only the shape and technical considerations, but the way the light refracted through the plastic and what effect different colours had!"

In the end, the Cobalt™ model was used to generate an STL file for a rapid prototype before exporting the surfaces directly to the toolmaker's CAM system. "After the first molds were made, I had a call from the customer to tell me that the light refraction on the renderings was identical to the actual product."



The Optima Mug is now in full production and available from Village Mill in a range of colours and options.



Background/Contact:

For more details on this project contact:

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United Kingdom

Phone: +44 (0) 1743 231661

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