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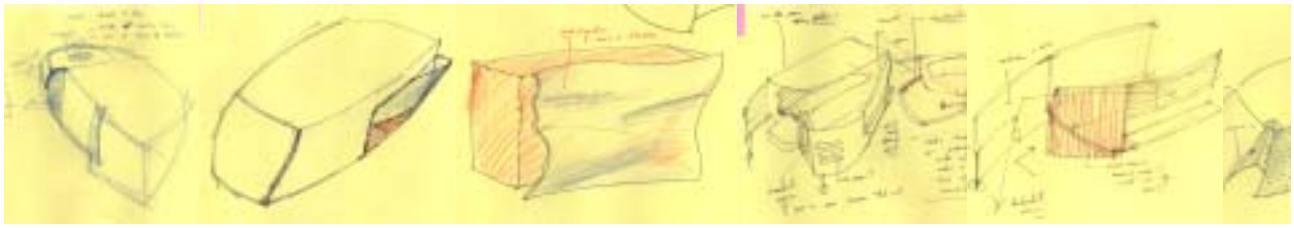
20.10.04

ACMI **Screen Lounges** Progress report on construction

From **Crowd Productions**: A report on progress of research, design and construction work to 07.04.04



01.] **Report on construction progress: fabricating the acrylic partition screen**

10.03.04. On Wednesday 10 March Crowd Productions delivered the chassis support struts to Peter Smits Sheet metal for folding. The support struts have been fabricated in 3mm mild steel and need to resist considerable compression loading and torsion forces. To remain rigid the struts are folded to greatly increase their strength and stability.

02.] **Report on construction progress: fabricating the acrylic partition screen**

17.03.04. On Wednesday 17 March Crowd Productions delivered the laser cut sheet steel components for the acrylic partition screen chassis to Cash Engineering Research for assembly. David Poulton fabricated a welding jig in MDF to locate the components during the welding process to maintain a precise square connection at all welds. As the principal components only have compound curves along all edges the jig is critical to ensure exact positioning. Additional struts in the form of aluminium box sections will be tape bonded to the upper and lower plates of the mild steel chassis. This is designed to achieve two results. The top and bottom plates must resist considerable bending forces once a tensioned cross brace has been fitted to the chassis. The cross brace resists lateral distortion. The top and bottom plates must also resist any twisting forces which will occur due to uneven loading from the weight of the translucent red acrylic egg crate grill.

Above: Detail of the welding jig for the acrylic partition screen chassis, detail of the welded chassis, detail of the stiffening beams prior to installation

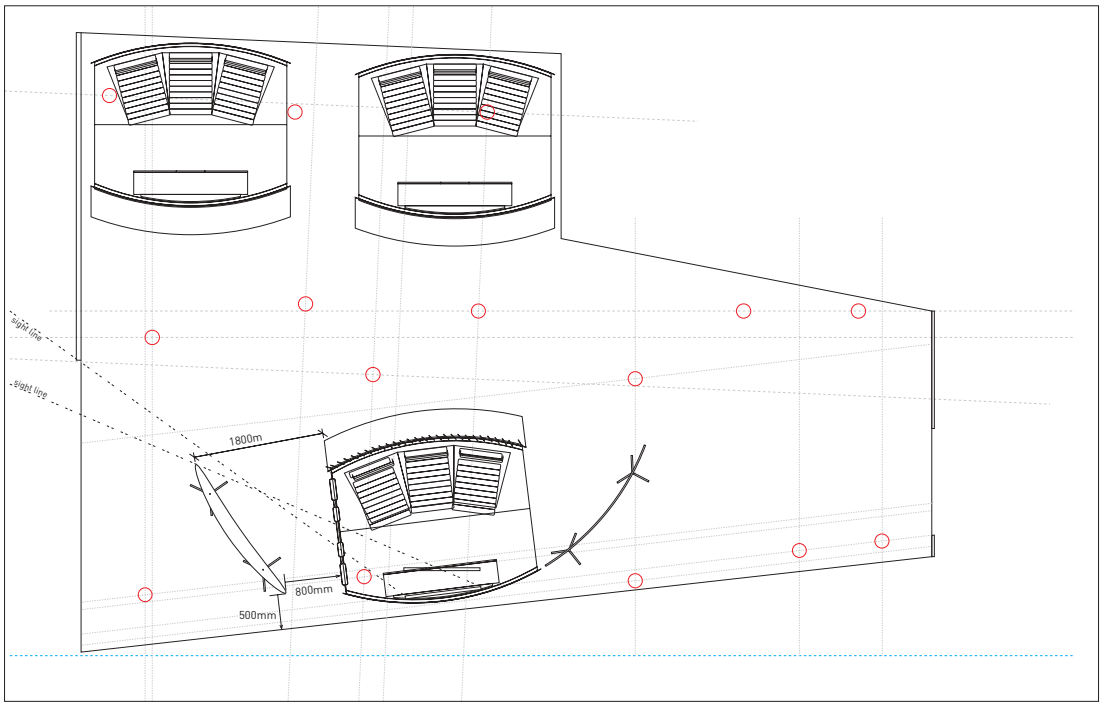
03.] **Report on construction progress: Fabricating the acrylic partition screen**

14.04.04. On Wednesday 14 March Crowd Productions ordered the production a tension cross brace for the acrylic partition screen. This element is the final component that forms the tensegrity structure that makes up the chassis of the acrylic screen. We have designed the structural chassis of the acrylic screen as a tensegrity structure as they are the lightest, most immaterial of structures, yet able to resist great compression and twisting forces, while remaining rigid. To fabricate this component we have gone to McDonald Marine, specialists in tensegrity fabrication and architectural rigging. On Wednesday 06.05.04 Conomatic sheet metal fabricated the laser cut stabiliser rings for the acrylic partition screen chassis. These rings are inserted between the leg assembly and the lower chassis. When the chassis is bolted tight the rings act to subtly deform the lower plate of the chassis and increase its strength. They also resist any rocking potential left in the junction between the leg assembly and the chassis.

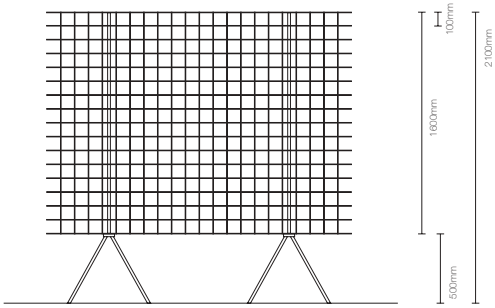
Above: Detail of the acrylic partition screen leg system, detail of the fitted cross brace to the back of the partition

04.] **Report on construction progress: Locating the acrylic partition screen in the Screen Lounge at ACMI.**

At the request of ACMI Crowd Productions has prepared a location plan to illustrate how the acrylic partition screen is to be positioned and the visual barrier it affords to Screen Lounge pod 01. Please note that this was not its primary intended purpose. Its principle purpose is the signal the presence of activity in the Screen Lounge space. Our concern, as designers has always been that the room selected for the Screen Lounge space appears more like a store room to the public than a room designated for an important activity. Hence we proposed to develop the acrylic screen to highlight the Screen Lounge presence. The plan shown indicates the angle through which vision of the plasma monitor in Screen Lounge 01 is obscured by the acrylic screen.



Above: Plan of the Screen Lounge showing the proposed location of the acrylic partition screen and sight lines from the southern entrance.



Left: Elevation drawing of the acrylic partition screen. Tether points on the frame are proposed at the heads of the tie rods mounted above each leg unit.

05.] **Report on construction progress: Fabricating the final acoustic partition screens**

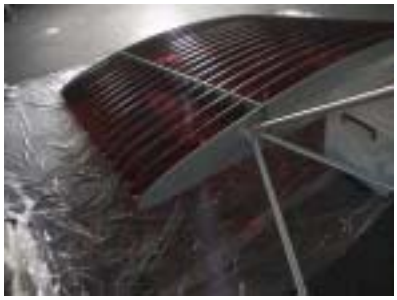
15.04.04. On Thursday 15 April Collins Anodic completed the natural anodising of the aluminium finishing strips for the acoustic partitions. On Saturday 08 May Source One Alliance delivered the acoustic foam for the acoustic screens required to complete the Memory Grid fit out. On Sunday 16 May the acoustic partition Screens were assembled at Crowd. On Thursday 20 May the last two acoustic screens for the Memory Grid were delivered to ACMI at Federation Square.

Above: Completed acoustic foam partition screen showing the surface, David Poulton completing assembly of the legs, assembled screens arranged as partition wall

07.] **Report on construction progress: Delivery and assembly of the acrylic partition screen**

19.06.03. On Saturday 19 June the acrylic partition screen chassis was completed at Crowd Productions. Notching of the frame was made to accommodate the tension cross brace and the brace was installed. The 40 wooden assembly blocks were tested in a trial installation of the translucent red acrylic egg crate core in the final vertical orientation. On Mondayday 04 October the acrylic partition screen was delivered to ACMI at Federation Square. This partition is the final element of the contracted fit out and brings top an end our construction, assembly and delivery work.

Left/above: Completed acrylic partition screen at ACMI.



Left: Images of the assembly of the acrylic partition screen at ACMI at Federation Square.

08.] **Report on construction progress: delivery of the final components for Memory Grid pod 05 into storage at ACMI**

04.10.04. On Monday 04 October all of the remaining components for Memory Grid pod 05 were delivered to ACMI at Federation Square for erection. This included the the upper walls for Memory Grid pod 05 along with the internal wall panels, end tie rods, rope tracks, upper wall trims , blister pack clips, image light guides, external fixings and connecting bolts.


Left: Images showing the completion of the upper wall components for Memory Grid pod 05 ready for delivery to ACMI at Federation Square.

09.] **Report on completion of the contract. Writing the assembly/disassembly manual for the Screen Lounge pods.**

Following is the manual for the assembly and disassembly of the Screen Lounge pods. We have sent it to all of you so that this information is freely available and logged onto everybody's computer. If you are involved with the use or maintenance of the Screen Lounge pods please read this document.

10.] **Report on completion of the contract. Delivery of final items after practical completion**

As outlined in the contract Crowd Productions will deliver within two days of the release of this report three copies of all contract and shop drawings to ACMI, a CD ROM of the same [many of these drawings are in PDF format as requested by our fabricators] and a list of all of our subcontractors.