

Application No. 782: Covering exhibition booth with magnetic tape

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Modular exhibition booth with aluminium frame, fabric & magnetic tape

Project: Dismountable exhibition booth

We are students at the University Niederrhein, which offers different degree programs around textile engineering. The objective for our project work was to design an exhibition booth as well as develop dismountable elements for an exhibition booth that incorporate textile surfaces and interlocking systems common in the textile industry.



Implementation with aluminium frame and magnetic tape

Our task was primarily to build a dismountable pedestal with the measurements 40x50x60 cm. We created an aluminium frame that can be easily put together with interlocking elements.

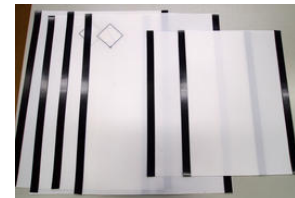


This aluminium frame also had to be covered with a textile surface, so it could be used on all sides and turned every which way.

We tested various solutions with magnets and finally decided on an implementation with self-adhesive magnetic tape.

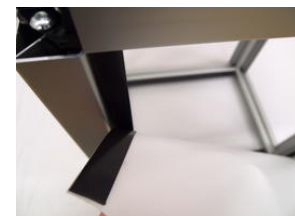
Magnetic tape on textile

On the bottom side of the textile we glued a strip of 2-cm-wide magnetic tape (www.supermagnete.de/eng/MT-20-STIC) on the left and right side respectively. Since the textile material is very thick and sturdy, we decided to glue the magnetic strips directly on the textile. At first we wanted to sew the strip on, but the adhesive on the tape was strong enough, so we didn't need to do that.



Magnetic tape on aluminium frame

The magnetic tape was also attached to the frame. The offset that resulted from placing one strip on top of the other was not a big deal in this case. The magnetic force was strong enough to hold the textile material and stretch it firmly.



Avoid offset with magnetic tape

After consulting with supermagnete.de we learned that we can minimize the offset by placing the magnetic tape strips correctly on top of each other: See How can you combine two self-adhesive magnetic tapes? (www.supermagnete.de/eng/faq/comboination_mtstic) And really, after turning the magnetic strips the offset was no longer visible (see picture below).



Final result with no offset

Final product

We are very happy with the final product. You can see the magnetic force of the magnetic tape is strong enough to place exhibition objects on the pedestal.

The booth element will be used at the next trade fair and was especially developed by the University Zwickau upon our client's request. The end result was very well received by our client as she envisioned a visually pleasing, light and flexible alternative to wooden cubes.



Articles used

MT-20-STIC: Magnetic adhesive tape ferrite 20 mm (www.supermagnete.de/eng/MT-20-STIC)

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