

## Sustainably Manufactured Wall Guards

**Environmental and Human Health Impact:** Reduce environmental exposure to potentially harmful chemicals and consumption of raw material content by half.  
**Business Impact:** Cost neutral.

### Challenge

The traffic of carts, beds, wheelchairs, trash bins, and people traveling through the halls of hospitals and medical offices on a daily basis makes a Los Angeles freeway look like a country road on a Sunday. Protecting the walls from this traffic damage are durable, impact-absorbing, and scratch-resistant wall guards, typically affixed at waist height and at corners. Materials used to manufacture a product with the durability to protect against this type of damage often contain ingredients known to cause human and environmental health damage. In 2010, Kaiser Permanente purchased 33,000 linear feet, or 6.25 miles, of wall guards.

### Aim/Goal

- Set increasingly challenging standards for material composition of corner guards in order to eliminate chemicals of concern listed in our Environmental Purchasing Policy, including polyvinyl chloride (PVC), while maintaining optimum product performance.

### Team

Judy Ilgen – Project Manager, National Facilities Services (NFS)  
 Dennis Noecker – Sourcing Manager, Procurement & Supply

### Actions Taken

- ✓ In discovering that all commercially viable corner guards were made of PVC, Procurement & Supply and NFS revisited a previously successful approach for finding an environmentally-preferable product: challenging the marketplace to invent one.
- ✓ We contacted our incumbent supplier, Construction Specialties (C/S), and expressed our desire to move away from PVC and other chemicals of concern to a material that could be shown to be safer throughout its lifecycle.
- ✓ In 2008 C/S launched Acrovyn 3000, which was PVC-free but had bisphenol-A (BPA) due to polycarbonate and acrylonitrile butadiene styrene (ABS) and some persistent bioaccumulative toxins (PBT) in its colorants, with plans to continue green design.
- ✓ Through extensive research and development and partnering with McDonough Braungart Design Chemistry (MBDC), a global

sustainability consulting and product certification firm, C/S developed Acrovyn 4000.

### Results

- ✓ 100 percent of the Acrovyn 4000 product is recyclable if recovered.
- ✓ The typical Acrovyn 4000 product contains 52 percent recycled content from post-industrial sources.

Acrovyn	Acrovyn 3000	Acrovyn 4000
<ul style="list-style-type: none"> <li>• PVC</li> <li>• BPA</li> <li>• PBT</li> <li>• Dioxin</li> <li>• Phthalates</li> </ul>	<ul style="list-style-type: none"> <li>• PVC free</li> <li>• Phthalate free</li> <li>• Dioxin Free</li> <li>• Furan Free</li> <li>• BPA</li> <li>• PBT</li> </ul>	<ul style="list-style-type: none"> <li>• PVC free</li> <li>• Phthalate free</li> <li>• Dioxin Free</li> <li>• Furan free</li> <li>• BPA free</li> <li>• PBT free</li> <li>• Meets KP's Environmental policy</li> <li>• MBDC Award Recipient</li> <li>• 100% Recyclable</li> <li>• Contains 52% recycled content</li> </ul>

\*Dioxins, furans, and phthalates are groups of chemicals known to be toxic and cause cancer and other deleterious environmental impacts

### Lessons Learned

- ✓ KP can use strategic sourcing successes as leverage with other suppliers in the marketplace to proactively take initiatives to increase our sustainability portfolio and impact the marketplace.

### Next Steps

- ✓ Gradually replace all corner guards at KP sites with either Acrovyn 4000 or similar sustainable corner guard material.
- ✓ Partner with C/S to recycle old corner guards.