



Exploring ORACAL® 651™ vs. ORACAL® 631: Choosing the Right Plotter Film for Your Project

When it comes to selecting the ideal plotter film for your graphic projects, ORAFOL offers two prominent options: ORACAL® 651™ and ORACAL® 631. Each possesses unique characteristics tailored to specific needs, making it essential to understand their differences before making a choice.

Film Construction and Durability: ORACAL® 651™ is crafted as an Intermediate Calendered PVC Film, boasting a thickness of 2.5-mil, suitable for medium-term applications lasting up to 6 years. On the other hand, ORACAL® 631 features a Short-Term Calendered PVC Film with a 3-mil thickness, ideal for short-term projects lasting up to 3 years. This difference in construction and durability delineates their suitability for different usage scenarios.

Adhesive Properties: Both films come with distinct adhesive formulations to cater to diverse application requirements. ORACAL® 651™ uses a clear, solvent-based permanent adhesive, ensuring steadfast bonding for extended periods. In contrast, ORACAL® 631 utilizes a clear, water-based removable adhesive, facilitating clean removal without leaving residue behind. This makes ORACAL® 631 an excellent choice for temporary applications, preserving the integrity of underlying surfaces upon removal.

Finish Options: While ORACAL® 651™ offers a variety of glossy and matte finish options, including luxurious matte finishes, ORACAL® 631 focuses solely on matte finishes, with over 75 color choices. This distinction allows users to select the desired aesthetic appeal based on their preferences and project requirements.

Application Recommendations: Both films come with recommended application tapes tailored to optimize installation processes. ORACAL® 651™ pairs well with ORATAPE® HT55 (paper) and ORATAPE® MT95 (clear conformable) tapes, ensuring seamless application and adherence. Similarly, ORACAL® 631 benefits from these application tapes, enhancing ease of use and installation efficiency.

For hobbyists and crafters, consider ORATAPE® MT80P application tape. Its ultra-clear design and grid-patterned release liner make precise graphic placement effortless, perfect for intricate designs and small-scale projects.

Usage Scenarios: ORACAL® 651™ excels in applications requiring medium-term durability, such as automotive graphics, general signage, and window graphics. Its exceptional dimensional stability and weather resistance make it a go-to choice for outdoor projects demanding longevity and reliability. Hobbyists and crafters can utilize ORACAL 651 as a dishwasher safe solution when applying custom graphics to their favorite tumbler, mug, or serving dish.

Conversely, ORACAL® 631 caters to indoor and short-term outdoor applications, including museum displays, craft projects, and home décor graphics. Its removable adhesive ensures hassle-free removal without compromising surface integrity, making it ideal for temporary installations.



Conclusion: In conclusion, ORACAL® 651™ and ORACAL® 631 offer distinct advantages tailored to specific project requirements. While ORACAL® 651™ shines in durability and longevity for medium-term outdoor applications, ORACAL® 631 excels in versatility and ease of removal for indoor and short-term outdoor projects. Understanding these differences empowers users to make informed decisions based on their unique needs, ensuring optimal results and satisfaction.