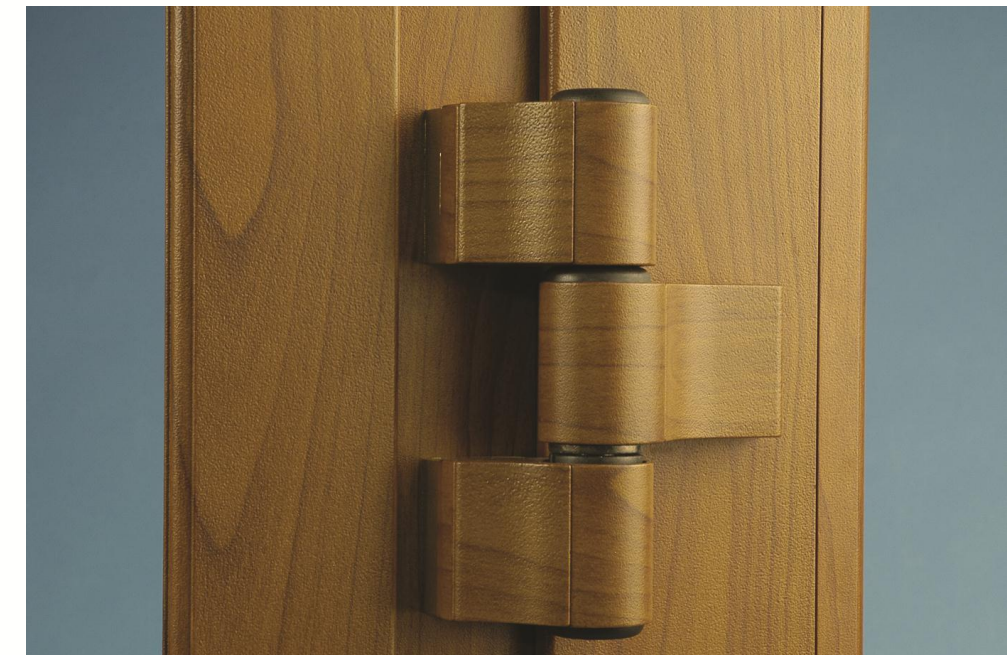


**Hyper-durable films  
Higher durability than ever!**



- Hyper-durablefilms
- Qualitydecoral Gold
- High durability
- Special dyes
- Combination with class 2 powders



### **DECORAL SYSTEM SRL**

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**TECHNICAL TOOLS**

*Laboratory Tests and Technical Documentation*

### Hyper-durable films

For Hyper-durable sublimation films (8XXXX/YY L4 series) the innovation is connected to the use of high resistance chromophores used in a printing line.

### Test and samples

To evaluate the resistance of the finishes, accelerated weathering tests are mainly used. These tests are carried out in lab, it means they are controlled and repeatable. They are meant to accurately simulate and recreate some of the natural exposure factors.



Pic 1: accelerated weathering test devices

Sample to be tested was made by permutating standard and Super-durable powder (Class 2) with sublimation films printed with standard and Hyper-durable dyes. Following combination was obtained:

- **DS 716 + 1401/01 L** (Standard PC with Standard film)
- **DS 716 + 81401/01 L4** (Standard PC with Hyper-durable film)
- **DS 0716 S + 1401/01 L** (Class 2 PC with Standard film)
- **DS 0716 S + 81401/01 L4** (Class 2 PC with Hyper-durable film)

Sample tested on accelerated weathering test machines for 1000 and for 2500 hours.

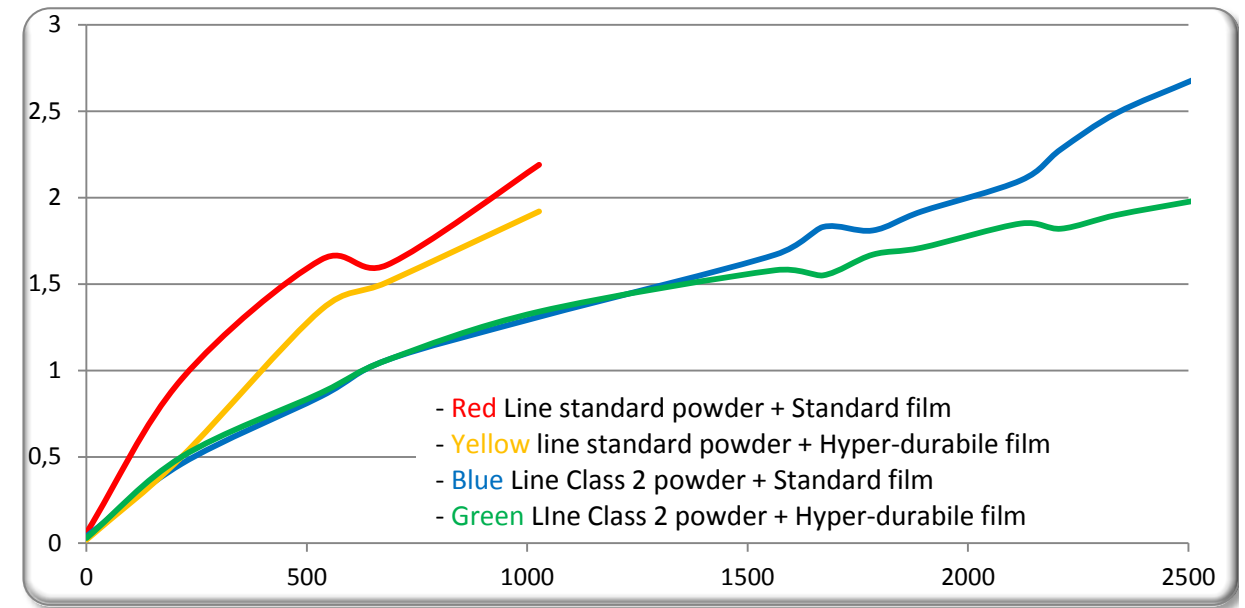
### Results

Graph, in the following page, plot  $\Delta E$  behaviour against elapsed time for the previous different samples. See how the Decoral System sublimation film Hyper-durable Series reduces significantly the value of  $\Delta E$  on both samples where this film was used; on standard powder and on super-durable powder, respectively yellow line and green line. The improvement, obtained by Decoral System Hyper-durable sublimation films, is noticeable even from the comparison of same powder coating base: yellow line versus the red line, for the standard powder, and green line versus blue line for the Super-durable version (class 2).

### Conclusion

Choosing hyper-durable sublimation films (8XXXX/YY L4 series) and DS 04XX S or DS 07XX S series powder coatings we can get decorated surfaces with a very high resistance to weathering agents.

### Graphics and pictures



Graph 1:  $\Delta E$  trend in function time (hours)



Pic 2: tested samples for 1000 hours (Standard powder) and 2500 hours (class 2 powder)