

## Introduction

**ORAFOL Americas Inc.**, warrants its pressure-sensitive adhesive films to be free of defects in materials and manufacture, and to perform as stated in published product technical information bulletins if properly stored, processed and applied. **ORAFOL Americas** will, at its discretion for all **ORAFOL®** product lines that do not meet specified effective performance life, issue credit for the purchase price of the material through the authorized distributor from where the material was purchased.

The customer assumes responsibility in determining product suitability for intended use on any surface to which **ORAFOL®** materials will be applied. **ORAFOL Americas** shall not be liable for any direct, indirect, or consequential damages, arising from the use or inability to use the product. This warranty is declared in lieu of any other claim, whether expressed or implied, and is not subject to interpretation.

In no event will **ORAFOL Americas** be responsible for labor, consequential or incidental damages of any kind. Samples must be submitted to an **ORAFOL Americas**-approved laboratory to verify any claims against the stated material warranty. Surfaces to which ORAFOL materials are applied are not covered under this warranty. Direct replacement material will be authorized on a case-by-case basis only, and an individual failure shall not be construed as an indication of failure for the entire vinyl graphic package.

Application and removal of **ORAFOL®** films should be carried out exclusively by a qualified graphic application specialist.

Inappropriate or incorrect application or removal of **ORAFOL®** films or use of film types unsuited for the application may result in substrate surface damage or considerably reduced ORAFOL® film performance and/or service life.

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### Service Life

The service life specified in the technical data sheets represents the maximum expected service life for vertical outdoor exposure under normal conditions identified as **Climate Zone 1** in the below Climate Zone diagram. The expected service life will be reduced for **Climate Zone 2 and 3** as shown in the tables below.

The following tables provide an overview of the expected reduction of maximum service life under deviating environmental conditions and orientations, divided into three climate zones. Applications with a deviation from the vertical level of more than +/-10° are considered horizontal applications. The mention of horizontal application is valid for all color films suitable for vertical and horizontal automotive applications (i.e., ORACAL® 970RA for full wrap or general automotive graphic application, ORACAL® 975, 951, 851, 751RA, 751, 651™ for general automotive graphic applications). In the case of all other films - not previously mentioned ORACAL®, ORAJET®, ORAGUARD®, ORALITE®, ORALUX® series films, the service life data apply only to vertical application uses.

For an overview of material combinations and expected maximum service life for vertical outdoor exposure under normal conditions and orientations, divided into three climate zones for printed/laminated ORAFOL® films, please review the (OCS) ORALIFE® Component System Warranty. ORAFOL Americas strongly encourages users to **register** and **qualify** for the (OCS) ORALIFE Component® System Warranty, [click here](#) for [details](#) and to [register](#).

### Note

The service life data exclude in principle any gradual changes that may be caused by aging or weather conditions during the stated outdoor durability period. Examples are minor color fading, reduction of gloss and surface embrittlement without crack formation.

## Expected Maximum Service Life in Years for Unprinted ORAFOL® Films

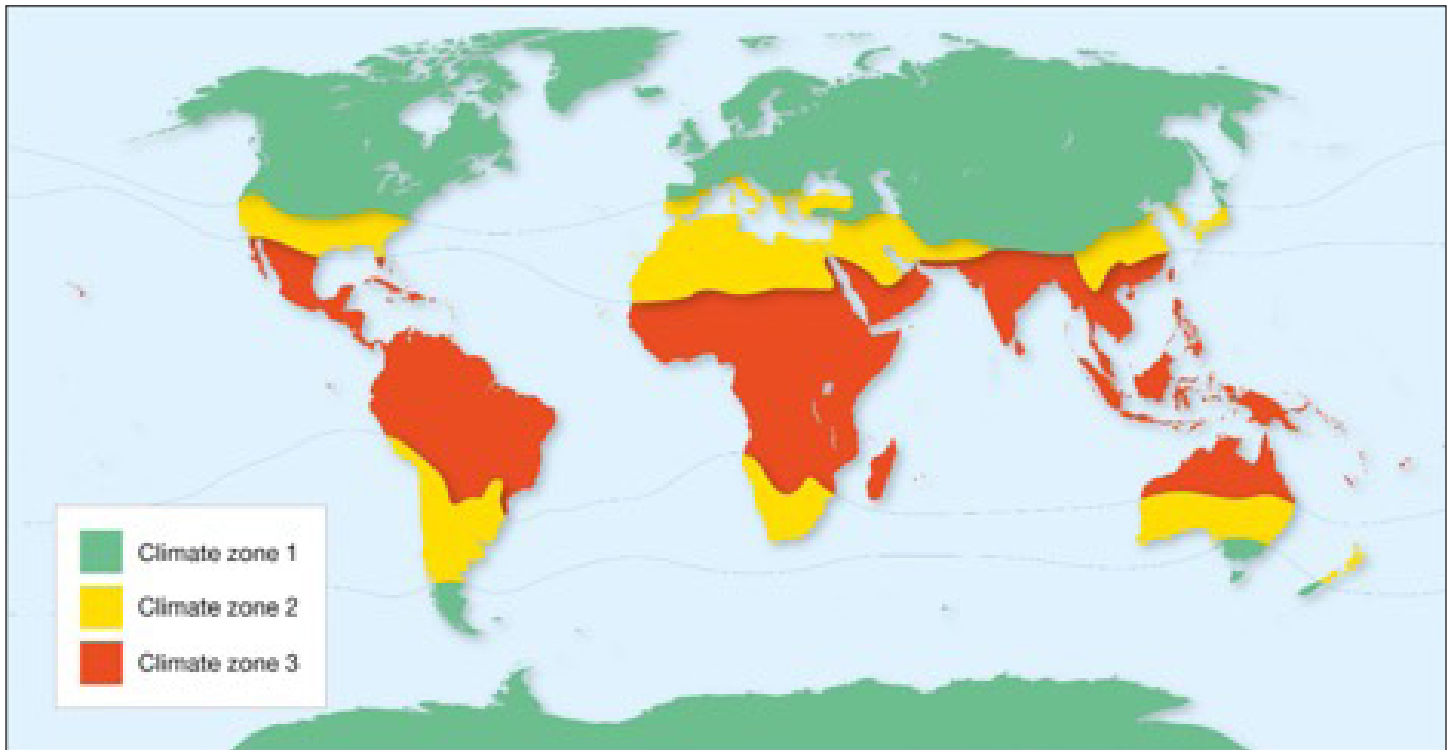
*Vertical & Horizontal Exposure*

Climate Zone 1* <i>Mild Climate</i>		Climate Zone 2* <i>Humid/Warm Climate</i>		Climate Zone 3* <i>Dry/Hot Climate</i>	
Vertical	Horizontal	Vertical	Horizontal	Vertical	Horizontal
Years		Years		Years	
12	6	10	5	8	4
10	5	8	4	6	3
8	4	6	3	4	2
7	3.5	5	2.5	3	1.5
6	3	4	2	2	1
5	2.5	3	1.5	1.5	0.75
4	2	2	1	1	0.5
3	1.5	1	0.5	0.5	0.25

\* Maximum expected service life in years

### Note

The information on expected maximum service life does not justify claims under guarantees, warranties or for other reasons. The information is based on practical experience under artificial and natural weathering under standard conditions and is not strictly applicable to the calculation of expected maximum service life for all vehicles, since there are so many possible influences that may cause perceived reduction in film performance or cosmetic blemishes, such as mechanical damage from an automated car wash, chemical and caustic cleaning agents, environmental impacts - such as acidic dew ("Fallout"), bird droppings, insect splatter, snow removal chemicals - that dwell on the ORAFOL® film for too long.



## Climate Zones Defined

*The Americas and Caribbean*

### Climate Zone 1

*Mild Climate*

### Climate Zone 2

*Humid/Warm Climate*

### Climate Zone 3

*Dry/Hot Climate*

#### Canada

#### United States

Alaska  
Washington  
Oregon  
Northern California  
Idaho  
Montana  
Wyoming  
Northern Utah  
Colorado  
North Dakota  
South Dakota  
Nebraska

Kansas  
Minnesota  
Iowa  
Northern Missouri  
Wisconsin  
Illinois  
Michigan  
Indiana  
Ohio  
Northern Kentucky  
Pennsylvania

Northern West Virginia  
Maryland  
Delaware  
New Jersey  
New York  
Vermont  
Massachusetts  
Connecticut  
New Hampshire  
Rhode Island  
Maine

Central & Southern California  
Nevada  
Central & Southern Utah  
Arizona  
New Mexico  
Oklahoma  
Texas  
Central & Southern Missouri  
Arkansas  
Louisiana

Central & Southern Kentucky  
Tennessee  
Mississippi  
Alabama  
Georgia  
Southern West Virginia  
Virginia  
North Carolina  
South Carolina  
Northern & Central Florida

Hawaii

Southern Florida

#### Mexico

All Central American countries

All Caribbean countries & territories

#### South America

Southern Chile

Southern Argentina

Central & Northern Chile  
Southern Peru  
Southern Bolivia

Uruguay  
Argentina

Colombia  
Ecuador  
Northern Peru  
Northern Bolivia  
Paraguay

Venezuela  
Guyana  
Suriname  
French Guiana  
Brazil