

## AP/990-WL



### Description

Gloss "Murales" type Film for large-sized printed decoration to apply on walls even irregular. The glue has airchannels to let the air escape. The Film adhesion depends on the kind of wall and on the exposition to the atmospheric circumstances. Fire Resistance B-S2-D0 in accordance with the European classification. To apply the film on irregular walls use a heatgun and the appropriate roller "AC.RULL" following the specific instructions. The film is conceived for internal/external use.

**Colours:** white gloss.

**Printability:** printable by printers using Solvent, Eco-solvent, UV and Latex inks.

### Technical information

#### Technical data

<b>Film:</b>	P.V.C. Cast.
<b>Film Thickness (without adhesive):</b>	55+/-5 µm (Op. Istr. n° 4).
<b>Liner:</b>	PET-Liner 1 side siliconised "Air Free FTX System" (Micro Channel Technology).
<b>Release:</b>	50+/-15 cN/25mm.
<b>Adhesive:</b>	ultra-permanent acrylic high cohesion.
<b>Grammage:</b>	25 +/- 5 g/m2.
<b>Adhesion after 20 min.:</b>	min. 350 N/m. Peel 180° at 20°C on steel (Op. Istr. n° 7).
<b>Adhesion after 72 h. :</b>	min. 650 N/m. Peel 180° at 20°C on steel (Op. Istr. n° 7).
<b>Method of application:</b>	dry.
<b>Application temperature:</b>	suggested between 12° and 28°C.
<b>Shrinkage:</b>	< 0,2 mm after 48 h. at 70°C on steel (Op. Istr. n° 8).
<b>Temperature resistance:</b>	from -50°C to +90°C adhered to steel no variation (Op. Instr. n° 15).
<b>Reaction to fire classification:</b>	B-S2-D0 (Standard EN 13501-1:2007+A1 Classification report CSI n° 0626DCREA14_6).

**Seawater resistance:**

adhered to steel no variation after 100 h. at 20°C  
(Op. Instr. n° 14).

**Average expected lifetime**

---

The data below refer to the film as it is, applied on a standard flat surface and not taking into consideration the final application. Therefore, they are indicative values intended only as a source of information, and do not constitute a guarantee.

Life estimates are determined on the basis of the results of UV and Xenon accelerated aging lab tests which simulate some conditions when unprocessed, non shaped, non printed film is submitted/**exposed vertically** (+/- 10% from the vertical) and in weather conditions typical of **Central Europe, correctly applied** on a flat surface.

**Factors which drastically reduce the film's expected lifetime:**

- horizontal/oblique exposure (angle greater than +/-10 ° from the vertical).
- exposure to long periods of sunlight as in southern climatic regions, areas characterised by high temperatures, high altitudes or high pollution.
- exposure facing towards the sun.
- imperfect application of the film and improper use of laminating machines.
- attack by solvents and other volatile parts contained in printing inks.
- excessive film deformation.
- improper cleaning and maintenance (use of aggressive detergents, scratches, abrasions and contaminations that may occur during installation or the lifetime of the product).
- surfaces subject to high temperatures.

**The actual lifetime of a product depends on several factors**, including the quality and the preparation of the surface, exposure (environment, weather, exposure angle), film maintenance, pollution. **Therefore, only the operator can determine the suitability of the product and its expected lifetime.**

In order to extend as much as possible the film's lifespan, we recommend following the instructions for Application, Cleaning and Maintenance set out below in this data sheet.

**Data from lab testing (UV - XENON TEST):**

8 years.

**Storage**

---

1 year, film must be kept warehoused at room temperature (20°C / 50% R.H.) suspended horizontally or placed in a vertically upright position in polythene bag.  
During the storage, gloss vinyl could become matt. This phenomenon, due to the pressure of the rolling up of the material, could worsen when close to the cardboard core and, is more frequent when the storage temperature is above 25°C and/or when the vinyl is particularly glossy and soft.  
It is possible to return the gloss of the vinyl by heating the surface with an industrial heat gun.

**Note**

---

The values and the data given are based on tests we believe to be reliable and are typical values intended only as a source of information, and do not constitute a guarantee.  
**Purchasers must independently determine, before use, the suitability of the material for their own specific use and under their own operating conditions** with the aim to determine if the APA product is suited for the specific goal and is furthermore suited for the use and the pre-selected application-method.

All APA-Print films are produced and packed under very strict quality control procedures in order to guarantee that the films are clean, free of dust and other impurities that might

com promise the printability. It's important that the inks are thoroughly dried before application and before any lamination takes place. The residual solvents can otherwise change the products' specific features. Purchasers must independently determine, the suitability of the product with their own printer and inks, under their own operating conditions, with the aim to determine if the APA product is suited for the specific goal.

---

## General information

### Warranty / exclusions of liability

APA materials are guaranteed to be free from all manufacturing defects.

In the event of ascertained defectiveness of the product, APA shall replace the materials used upon manufacturing the decorations.

**APA shall not be liable for any additional costs, such as the work necessary for reprinting the design, the losses related to production time, the costs for removing or re-applying the graphics.** APA, in addition, does not assume responsibility for the replacement of materials not produced by APA.

**A.P.A. SpA cannot be held responsibility for any damages other than the substitution of the goods.**

APA guarantees to maintain the interval of the variability of the colours of its products in the best possible way, using instrumental and visual checks.

To avoid colour variation, all the parts of the vinyl applied have to belong to the same production batch. It is also the case for decorations that are required for a long duration of time, updating or improvements of the decoration. Therefore, it is recommended to ask beforehand for the required material, belonging to the same production batch.

No salesman, representative, agent or distributor has authority to supply data different from those reported in this Technical Data Sheet. To make improvements all products may be modified without prior notice.

For a safe use of the self-adhesive materials by A.P.A. it is recommended to read the dedicated safety information.

For a safe use of the cleaners mentioned in this data sheet it is recommended to read the dedicated safety sheets.

### Print

The film is developed to be used on major printers using Solvent, Eco Solvent, UV and Latex inks. For a good printability and converting result we recommend allowing the rolls acclimatise in the print room at least 24 hours before printing or converting.

Too much temperature or humidity deviation between material and room climate can cause lay flatness and printability issues. Setting the most suitable profile, to get the best printing result.

### Over-lamination

**It's important that the inks are thoroughly dried before application and before any lamination takes place.** The residual solvents can otherwise change the products' specific features. Therefore after print we recommend to let the film rest at least 48 hours in a room with a temperature of 20° C.

Recommended lamination are the APA Over-lamination cast films L/991-WL and L/981-WL.

### Application

**The film is conceived for a highly professional use.**

**The staff that apply the vinyl must possess the requirements and the training necessary.**

**The film is developed for smooth and irregular walls.**

Due to the high tack film adhesiveness, **it is important to acknowledge that during the removal process, it is possible that varnish or primer can be peeled off the wall together with the film. Furthermore, possible glue traces can remain on the wall surface.**

Before applying the film always test the compatibility between the self-adhesive vinyl and the surface of the decoration and in particular ensure that the wall is perfectly dry and free of dust or other substrates that could compromise the adhesion of the film and cause it to detach in the future.

Before applying the film always test the compatibility between the self-adhesive vinyl and the surface of the decoration.

In the presence of irregular walls the use of application roller "AC RULL" is recommended. For the use of roller follow the attached instructions.

It is recommended to apply the film in a room with a temperature between 12 and 28°C.

**Apply the vinyl only using the dry method. Do not use water.**

This vinyl is not compatible with:

- surfaces with small superficial tensions, silicone, rubber, PP, PE and all apolar surfaces
- painted surfaces with poor adhesion of the paint to the surface underneath
- dusty surfaces
- dirty surfaces
- flexible surfaces such as banners, truck curtains or textiles
- surfaces that give out gas (out-gassing)
- gasoline vapors or spillages

## **Cleaning the vinyl**

---

**Proceed with the cleaning process if the printed film has been over-laminated. use water with soft cloths.**

Use water with soft cloths and non-aggressive detergents.

**Do not use rough sponges and cloths, abrasive creams or very strong solvents.**

Cleaning with unsuitable products and tools could cause a premature deterioration of the vinyl. To remove ground in dirt, we advise the use of the quick cleaner APA CLEANER FILM and water. **Do not use wax or polishing products** which, in addition to being difficult to remove, may alter or accelerate the deterioration of the film.

The film with a gloss finish, if treated badly, could go matt and stripe beyond remedy.

## **Maintenance**

---

The surface of the vinyl is delicate and therefore should be treated with care. Avoid rubbing against objects that could cause scratches or ripping of the vinyl beyond repair.

An extended exposition to solar rays and to atmospheric agents could provoke a premature aging of the film, especially for the parts exposed horizontally or to the south.

In this regard, gloss films can lose shine and give a matt appearance.

**In conclusion, we recommend protecting the decorated surface from the sun and the elements to the greatest extent possible.**

If a film deterioration should arise, for example, fading, change of colour or become brittle, then an immediate removal is recommended.

**For a good maintenance of the vinyl regular cleaning is recommended.**

## **Removal**

---

Due to the high tack film adhesiveness, **it is important to acknowledge that during the removal process, it is possible that varnish or primer can peel off the wall together with the film. Furthermore, possible glue traces can remain on the wall surface.**

During the removal process it is important to apply heat gun to the self-adhesive vinyl.

The operations of the vinyl removal are conditioned by many factors, such as the time passed from the application, exposure of the decoration either outdoors or indoors, type of surface, temperature of the room and of the surface, etc... **Therefore it is difficult to**

**quantify and determine the speed and execution time of the removal by A.P.A. SpA.**

**The company APA cannot be held responsible of any damage caused during the removal phase and/or damages of the surface upon which the film has been applied.**

CSI SpA  
Certificazione e Testing

*Sede Legale*  
Cascina Traversagna, 21  
20030 SENAGO (MI)  
*Direzione - Uffici - Laboratori*  
Viale Lombardia, 20  
20021 BOLLATE (MI)  
Tel. +39 02 383301  
Fax +39 02 3503940  
www.csi-spa.com

R.E.A. 1466310  
Reg. Imprese 352168/8620/18  
C.F./P.IVA IT11360160151  
Cap. Sociale euro 1.040.000



LAB N°0006  
Signatory of EA, IAF and ILAC  
Mutual Recognition Agreements

## RAPPORTO DI CLASSIFICAZIONE CLASSIFICATION REPORT 0626\DC\REA\14\_6

Rapporto di classificazione di reazione al fuoco del prodotto

Reaction to fire classification report of product ..... : **CAST FILM CON ADESIVO  
ULTRAPERMANENTE**

Descrizione

Description ..... : **Vedi pag. 2 / see page 2**

Per conto di

On behalf of ..... : **A.P.A S.p.A.**

Indirizzo

Address ..... : **Via Marradi, 1  
20123 Milano**

Norma tecnica: EN 13501-1 - Classificazione al fuoco di prodotti ed elementi da costruzione -  
**Parte 1: Classificazione sulla base dei dati di prova derivati da prove di reazione al fuoco**  
Technical standard: EN 13501-1 Fire classification of construction products and building  
elements - Part 1: Classification using test data from reaction to fire tests

Data / Date ..... : **04/09/2014**

## 1. DATI GENERALI / *GENERAL DATA* :

Identificazione delle norme di riferimento / *Standard reference identification*:

- EN 13501-1:2007+A1 - Classificazione al fuoco di prodotti ed elementi da costruzione - Parte 1: Classificazione sulla base dei dati di prova derivati da prove di reazione al fuoco
- EN 13501-1:2007+A1 *Fire classification of construction products and building elements - Part 1: Classification using test data from reaction to fire tests.*
- EN ISO 11925-2:2010 Prove di reazione al fuoco prodotti edilizi - parte 2 - innesco quando soggetto al diretto contatto della fiamma
- EN ISO 11925-2:2010 *Reaction to fire tests for building products - part. 2 -ignitability when subjected to direct impingement of flame.*
- EN 13823:2010 Prove di reazione al fuoco prodotti edilizi - Prodotti edilizi escluse le pavimentazioni esposti ad un attacco termico di un singolo elemento in combustione
- EN 13823:2010 *Reaction to fire tests for building products \_ Building products excluding floorings exposed to the thermal attack by a single burning item.*

## 2. IDENTIFICAZIONE DELLE PROCEDURE / *PROCEDURES IDENTIFICATION*

- Procedura normalizzata / *Standard procedure* : ..... : **SI / YES**
- Controllo calcoli e trasferimento dati / *Calculation and data transfer check* ..... : **SI / YES**

## 3. DETTAGLI DEL PRODOTTO CLASSIFICATO / *DETAILS OF CLASSIFIED PRODUCT*

### 3.1 Natura e impiego / *Nature and end use application* :

Il prodotto **CAST FILM CON ADESIVO ULTRAPERMANENTE** è definito come un rivestimento murale decorativo. La sua classificazione è valida per le seguenti condizioni di impiego:

*The product **CAST FILM CON ADESIVO ULTRAPERMANENTE** is defined as a decorative wallcovering. Its classification is valid for the following end use application(s):*

- Rivestimento parete – Incollato su supporto incombustibile o cartongesso
- *Wall covering – Glued on non combustible substrate or gypsum plasterboard*
- Rivestimento soffitto – Incollato su supporto incombustibile o cartongesso
- *Ceiling covering – Glued on non combustible substrate or gypsum plasterboard*

### 3.2 Descrizione / *Description*:

Il prodotto **CAST FILM CON ADESIVO ULTRAPERMANENTE** è compiutamente descritto nei rapporti di prova in sussidio della classificazione elencati in 5.1

*The product **CAST FILM CON ADESIVO ULTRAPERMANENTE** is fully described in the test reports in support of the classification listed in 5.1.*

## 4. DICHIARAZIONI / *DECLARATIONS*

- Questo rapporto di classificazione definisce la classificazione assegnata al prodotto indicato in copertina secondo le procedure stabilite nella norma EN 13501-1 /
- *This classification report defines the classification assigned to the product mentioned on the cover in accordance with the procedures given in EN 13501-1.*
- I risultati di prova contenuti nel presente rapporto di classificazione si riferiscono esclusivamente al campione provato
- *Test results contained in this classification report relate only to the specimens tested.*
- Il presente rapporto di prova non può essere riprodotto parzialmente senza l'autorizzazione del Responsabile di Laboratorio
- *The test report shall not be reproduced except in full without the written approval of the Managing Director.*



## 5. RAPPORTI DI PROVA E RISULTATI DI PROVA IN SUPPORTO DI QUESTA CLASSIFICAZIONE

### TEST REPORTS AND TEST RESULTS IN SUPPORT OF THIS CLASSIFICATION

#### 5.1 Rapporti di prova / test reports

Nome del laboratorio / Name of laboratory	Nome del Committente / Name of sponsor	Numero di Identificazione del rapporto di prova / Test report ref. No.	Metodo di prova / test method
CSI S.p.A.	A.P.A S.p.A.	0626/DC/REA/14_1	EN 13823
CSI S.p.A.	A.P.A S.p.A.	0626/DC/REA/14_2	EN ISO 11925-2

#### 5.2 Risultati di prova per prodotti da costruzione esclusi i pavimenti

Test results for construction products except floorings

Metodo di prova Test method	Parametro Parameter	Numero di prove Number of tests	Risultati / Results	
			Parametri continui media / Continuous parameter average	Parametri di conformità / Compliance parameter
<b>EN ISO11925-2</b>  Attacco della fiamma in superficie Surface flame attack Applicazione 30 s / 30 s exposure  Attacco della fiamma all'estremità Edge flame attack Applicazione 30 s / 30 s exposure  Gocce/parti accese / Flamig droplets/particle	$F_s \leq 150 \text{ mm}$	6	(-)	S / Y
	$F_s \leq 150 \text{ mm}$	6	(-)	S / Y
	Innesco della carta da filtro/ Ignition of the filter paper	12	(-)	N / N
<b>EN 13823</b>	FIGRA <sub>0,2MJ</sub>	3	14,9	(-)
	FIGRA <sub>0,4MJ</sub>		4,2	(-)
	LFS < Edge		(-)	S / Y
	THR <sub>600s</sub> [MJ]		1,0	(-)
	SMOGRA [m <sup>2</sup> /s <sup>2</sup> ]	3	13,1	(-)
	TSP <sub>600s</sub> [m <sup>2</sup> ]		60,6	(-)
	Gocce/parti accese Flaming droplets/ particles	3	(-)	N / N





## 6. CLASSIFICAZIONE E CAMPO DIRETTO DI APPLICAZIONE *CLASSIFICATION AND DIRECT FIELD OF APPLICATION*

### 6.1 Riferimenti e campo diretto di applicazione / *Reference and direct field of application*

Questa classificazione è stata condotta conformemente alla clausola 8.2 della EN 13501-1:2007+A1.  
*This classification has been carried out in accordance with clause 8.2 of EN 13501-1: 2007+A1.*

### 6.2 Classificazione / *Classification*

Il prodotto **CAST FILM CON ADESIVO ULTRAPERMANENTE** in relazione al suo comportamento alla reazione al fuoco è classificato:

*The product **CAST FILM CON ADESIVO ULTRAPERMANENTE** in relation to its fire reaction behaviour is classified.*

**B**

La classificazione aggiuntiva in relazione allo sviluppo di fumo è:  
*The additional classification in relation to smoke production is:*

**s2**

La classificazione aggiuntiva in relazione alle gocce/particelle accese è:  
*The additional classification in relation to flaming droplets/particles is:*

**d0**

Il formato per la classificazione di reazione al fuoco per i prodotti da costruzione eccetto i pavimenti è la seguente:

*The format of the reaction to fire classification for construction products except flooring is:*

Comportamento al fuoco <i>Fire behaviour</i>		Sviluppo di fumo <i>Smoke production</i>			Parti infiammate <i>Flaming droplets</i>	
<b>B</b>	-	<b>s</b>	<b>2</b>	-	<b>d</b>	<b>0</b>

### 6.3 Campo di applicazione / *Field of application*

Questa classificazione è valida per le seguenti condizioni di impiego /  
*This classification is valid for the following end use conditions:*

- Incollato su supporto incombustibile o cartongesso  
*Glued on non combustible substrate or gypsum plasterboard*
- Senza cavità  
*Without gap*
- Tipo di fissaggio: incollato  
*Type of fixings: glued*



Questa classificazione è anche valida, per i seguenti parametri del prodotto /  
*This classification is also valid, , for the following product parameters:*

- Colore: qualsiasi  
*Colour: any*
- Altre denominazioni commerciali incluse:  
*Other trade names included:*  
SERIE CW  
SERIE CAST  
SERIE XF  
SERIE FT  
ST/961-FT  
C/781  
SERIE AP (prodotti con processo cast e dotati di adesivo ultrapermanente / *manufactured with cast and with ultrapermanent adhesive*)  
SERIE L (prodotti con processo di cast e dotati di adesivo ultrapermanente / *manufactured with cast and with ultrapermanent adhesive*)

## 7. LIMITAZIONI / LIMITATIONS

### 7.1 Avvertimento / Warning

Questo documento non rappresenta un'approvazione di tipo od una certificazione del prodotto  
*This document does not represent type approval or certification of the product.*

La classificazione assegnata al prodotto in questo rapporto è relativa ad una dichiarazione di conformità del fabbricante nel contesto del sistema 3 di attestazione di conformità e marcatura CE ai sensi della regolamento sui prodotti da costruzione.

Il fabbricante ha presentato una dichiarazione, che è conservata in archivio. Questo conferma che il progetto del prodotto non richiede specifici processi, procedure o fasi (p.e. senza aggiunta di ritardanti di fiamma, limitazione del contenuto organico, o aggiunta di cariche) che sono diretti a migliorare la prestazione al fuoco per ottenere la classificazione ottenuta. Come conseguenza il fabbricante ha concluso che il sistema 3 di attestazione è appropriato. Il laboratorio di prova, pertanto, non ha svolto alcun ruolo nel campionamento del prodotto per la prova, anche se conserva riferimenti appropriati, forniti dal fabbricante, a fornire la tracciabilità dei campioni provati.

*The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Regulation.*

*The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate.*

*The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested.*

DATA  
Date

04/09/2014

RESP. DIVISIONE  
Division Head

Paolo Mele

RESP. DEL CENTRO  
Managing Director

Raoul Gatti

## ACCESSORI

## ACCESSORY



**WALL FILM  
APPLICATOR ROLLER-50**  
Il rullino applicatore  
dotato di gomma spugna  
resistente al calore  
capace di pressare il film  
nelle irregolarità del muro.  
Larghezza rullo gommato  
50 mm

**WALL FILM  
APPLICATOR ROLLER-50**  
*The applicator roller with  
heat-resistant spongy  
rubber, capable to press  
the film AP/990-WL into the  
irregularities of the  
wall. Width of the roller  
50 mm*



**WALL FILM  
APPLICATOR ROLLER-30**  
Il rullino applicatore dotato  
di gomma spugna  
resistente al calore capace  
di pressare il film nelle  
irregolarità più piccole  
del muro e fughe tra  
mattonelle. Larghezza  
rullo gommato 30 mm

**WALL FILM  
APPLICATOR ROLLER-30**  
*The applicator roller with  
heat-resistant spongy  
rubber, capable to press  
the film AP/990-WL deeper  
into the irregularities of  
the wall and the spacings  
between bricks. Width of  
the roller 30 mm*



### AC.THM.MINILUX

Termometro infrarosso con puntatore laser. Display di lettura "bright screen" con illuminazione Led di cortesia

### AC.THM.MINILUX

Infrared laser thermometer with a LED "bright screen" display screen

# APA WALL



## ISTRUZIONI APPLICAZIONE

## APPLICATION INSTRUCTIONS



### ATTENZIONE

AP/990-WL è il Cast Film autoadesivo di lunga durata, progettato per essere applicato su muri e pareti irregolari. Tuttavia, considerando la natura irregolare e spesso polverosa dei muri, APA non può dare indicazioni sulla durata di adesione del film.

### ATTENTION

AP/990-WL is the long lasting self-adhesive cast film specifically designed for wall applications. However, APA cannot indicate accurate life expectancy of the film once applied, due to variations of wall types as well as cleanliness of the surface, for example, irregularities and dust.



## PULIZIA

Prima di applicare il film, è necessario spolverare quanto più possibile la superficie del muro con una spazzola o aspirapolvere. Rimuovere polvere, ragnatele, e piccoli granelli. Per la pulizia del muro non utilizzare alcun tipo di liquido, acqua o cleaner che renderebbero umida la superficie di applicazione, compromettendo l'adesione del film.

## CLEANING

Before applying the film, it is necessary to clean the surface of the wall as much as possible, using a brush or Hoover, removing any loose material, such as dust, dirt and spider's webs. It is important that you do not clean the wall with any kind of liquid as this will compromise the adhesion of the film to the wall.

## APPLICAZIONE

L'applicazione di AP/990-WL deve essere effettuata ad una temperatura ambiente non inferiore ai 15°C.

APAWall è un film per stampa digitale, pertanto prima dell'applicazione, è necessario assicurarsi della completa asciugatura degli inchiostri, poiché la presenza di solventi potrebbe compromettere l'adesione della grafica.

Prima di laminare AP/990-WL con l'apposito Film Cast trasparente L/991-WL (lucido) o L/981-WL, (opaco) assicurarsi della completa evaporazione dei solventi contenuti negli inchiostri. L'attesa può essere superiore alle 24-48 ore.

AP/990-WL va applicato a caldo con l'ausilio di un phon industriale, il rullino applicatore AC.RULL.50. e il termometro AC.THM.MINILUX infrared con puntamento laser per il rilevamento della temperatura.

### FASI DI APPLICAZIONE:

- 1 Stendere il film sul muro privo di carta siliconata.
- 2 Portare con il phon industriale una piccola area del film non laminato alla temperatura di circa 80°C. ed a circa 90° C se laminato.
- 3 Premere contemporaneamente con l'apposito rullino l'area riscaldata, in modo che visivamente il film si conformi perfettamente alle irregolarità del muro.
- 4 Ripetere l'operazione 3 su tutta la superficie del film, partendo dall'alto verso il basso.
- 5 Accertarsi che tutte le aree si siano conformate alla superficie.
- 6 In presenza di fughe, righe o buchi nella parete, utilizzare il rullino più piccolo AC.RULL.30 riscaldando sempre l'area interessata.

La massima adesività del film AP/990-WL avviene dopo 48 ore circa dall'applicazione.

## APPLICATION

*The AP/990-WL should be applied at a temperature of at least 15°C.*

*APAWall is a film for digital printing. Therefore, before application, it is necessary to ensure that the ink is completely dry, as the presence of solvents could compromise the adhesion.*

*Before laminating AP/990-WL with the appropriate transparent cast films L/991-WL (Gloss) or L/981-WL (Matt), ensure that the solvents contained within the ink are evaporated completely. Typically the time required is between 24-48 hours.*

*AP/990-WL should be applied hot using a professional heat gun, the application roller (AC.RULL.WL50) and the infrared laser thermometer (AC.THM.MINILUX) to measure the temperature.*

### APPLICATION PHASES:

- 1 *Apply the film on the wall without the backing paper.*
- 2 *Using a professional heat gun apply a small part of the film with a temperature of 80°C if un-laminated or 90°C if laminated.*
- 3 *Push at the same time with the appropriate roller to the heated part of the film, in a way that allows you to see the film conforming perfectly to the wall surface.*
- 4 *Repeat the third phase on all the surface of the film starting from the top working downwards.*
- 5 *Ensure that all parts have conformed to the wall surface.*
- 6 *In order to apply the film easier, where there are brick spacings, lines or holes, use the smaller application roller (AC.RULL.WL30).*

*The maximum adhesion of the film AP/990-WL occurs after approximately 48 hours after application.*