



**Once again Russia has selected Italian artisan expertise for the restoration of the decorative patrimony of the sumptuous Rooms of Saint Andrew and Saint Alexander in the Grand Palace of the Kremlin.**

# An Italian restoration for the **Kremlin**

In spring of 1998, on occasion of the restoration of two of the most prestigious rooms of the Grand Palace of the Kremlin in Moscow, quarters of the Russian head of state, two cultures of great artistic tradition met once again: Italian and Russian. The two rooms are those of the Throne (or of Saint Andrew) and of Saint Alexander. The Room of Saint Andrew is a gala hall located on the second floor of the Kremlin, and is close to the Rooms of Saint Alexander and Saint George: their names all derive from Russian orders of chivalry. The Room of Saint Andrew was destined to the crowning of the czar, and in 1997 it was subject to an important internal restoration. The arrival of Italian architects in Russia between XV and XVI century gave way to the realization of some of the constructions inside the fortified citadel of the Kremlin, such as the embattled walls similar to those of the Sforzesco Castle of Milan, or the bell tower of Ivan the Great or still, the cathedrals of the Assumption and of the Archangel. To recover the artistic value of the Rooms of Saint Andrew and Saint Alexander, the drawings of the precious stuccowork that decorated the surroundings in the periods of greatest luxury were recovered, while the cloths were inspired by the tapestry of that time. But above all, the precious inlaid wooden floor that was destroyed during Stalin's regime was restored to these rooms. Crucial and indispensable for the project's completion was the role of the Italian

specialists who are still today unsurpassed for their artisan ability and for their knowledge of antique decorative traditions. All the main decorative elements were prepared with care: the clay and wood models of the hand-made stuccowork, representing rosettes and leaves of laurel or oak, which required the approval of an apposite commission; the cloths for covering the walls, which had to recall the same turquoise colour of the ribbon of Saint Andrew's Order, selected among the Italian production of precious moiré silks. But the most delicate and technically complex intervention was the construction of the new wooden floor, which required six months just for preparing the material. The furnishing of all types of wood and the realization of the inlaid work was commissioned to the "I Vassalletti" company of S. Giovanni Valdarno, while installation, smoothing and finishing was assigned to the MPR company of Buccinasco, which for the execution selected grouts and binders, Italian of course, from Mapei. The iconographic collections of the beginning of the century, representing the luxurious surroundings of the Grand Palace of the Kremlin, suggested the starting point for the new design of the flooring. The results were the geometrical ornaments of the fringes in the Room of the Throne, and the floral trimmings of the central area or of the large circular "carpet" of the Room of Saint Alexander, carried out with 46 different varieties of wood.

*Photo 1. A suggestive prospective from the entrance towards the throne in the Room of Saint Andrew in the Palace of the Kremlin. The geometrical schemes of the venetian carpet and of the frame, and the articulated floral drawing of the central decoration, occupy a surface of about 1,000 m<sup>2</sup>.*

*Photo 2. The restoration of the floors required specialized labor coordinated by Italian artisans.*

*Photo 3. Surfacing of the Room of the Throne, or of Saint Andrew, in its final phase. In the background, the scaffolding necessary for the restoration of the wall decorations.*

*Photos 4, 5 and 6. In the photos, some phases of the installation, bonding and assembling of the single inlaid elements of the central drawing in the Room of Saint Andrew. NIVORAPID and LIGNOBOND were used for these operations.*



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**2** The restoration

Nothing remained of the antique floor, except for the large original beams. Restoration started from this structure to prepare the substrate fit to receive the new wooden mosaic floor. The first operation was that of laying and mechanically fixing a new planking on the existing beams, and then proceeding with levelling the union joints between the planks using NIVORAPID\*, an ultra fast-drying levelling mortar. After

obtaining substrate levelness, another perfectly regulated multi-layer substrate was positioned, and fixed to the previous one by means of dowels and LIGNOBOND\*, a two-component polyurethane adhesive, totally solvent and water-free, and resistant to moulds and bacteria. LIGNOBOND\*







Photo 7. The restoration of the large central inlaid work in the Room of Saint Alexander.

Photo 8. The Room of Saint Alexander: view from above of the complex inlaid rosette.



properties guarantee the union between two wooden-based materials without modifying dimensional stability. Furthermore, quick hardening allowed to proceed after just 24 hours, again with LIGNOBOND\*, with the successive installation of the last preparatory layer made of 10 mm thick 'lamarquet' oak boards. In some points the 'lamarquet' was directly installed on the cement substrate which, due to its low cohesion, was treated with PRIMER EP\*, a waterproofing and consolidating two-component primer.

At this point, on the degreased and smoothed oak substrate, the complex installation of the wooden mosaic began, and it required the labour of 50 Russian workers coordinated by three expert installers of the MPR company.

The first phase of the installation saw the dry positioning of the various inlaid works that arrived expressly from Italy, already partially assembled on a grid. Work proceeded with final bonding carried out with LIGNOBOND\* which, thanks to its exceptional characteristics and extreme versatility, allowed the installation of different materials without the need of different adhesives.

For the Rooms of Saint Andrew and Saint Alexander, respectively of 1000 and 650 m<sup>2</sup>, about 5,000 kg of product were used. The final surfacing of the flooring was meticulously done with mixtures of resins and sawdust obtained from the same wooden species of the mosaics, so that it would be consistent with the various colours of the inlaid wood.

The last finishing and protective operation was that of applying a first hand of primer, and then five layers of protective paint. 

#### TECHNICAL DATA

**Grand Palace of the Kremlin:** Ex Room of the Throne, or of Saint Andrew, and the Room of Saint Alexander - Moscow (Russia)  
**Year of construction:** 1998  
**Project:** installation of new inlaid wooden floor  
**Material installed:** inlaid wooden floor  
**Wood supplier and inlaid wood composition:** "I Vassalletti di Righi Elisabetta" – S. Giovanni Valdarno (Arezzo - Italy)  
**Parquet installer:** MPR – Buccinasco (Milan - Italy)  
**Mapei products:** LIGNOBOND, NIVORAPID, PRIMER EP  
**Mapei reseller:** MPR  
**Mapei coordinator:** Davide Ottolini

\*The products mentioned in this article belong to the "Products for resilient, wood and textile floor and wall coverings" line.

The technical data sheets are contained in the "Mapei Global Infonet" CD and at the "www.mapei.com" website.

**Lignobond:** two-component polyurethane adhesive totally water and solvent-free for wooden floors  
**Nivorapid:** ultra-fast drying (4-6 hours) thixotropic cement based levelling mortar for vertical surfaces, and thicknesses of 1 to 20 mm  
**Primer EP:** waterproofing and consolidating two-component solvent-based epoxy primer for industrial floors.

