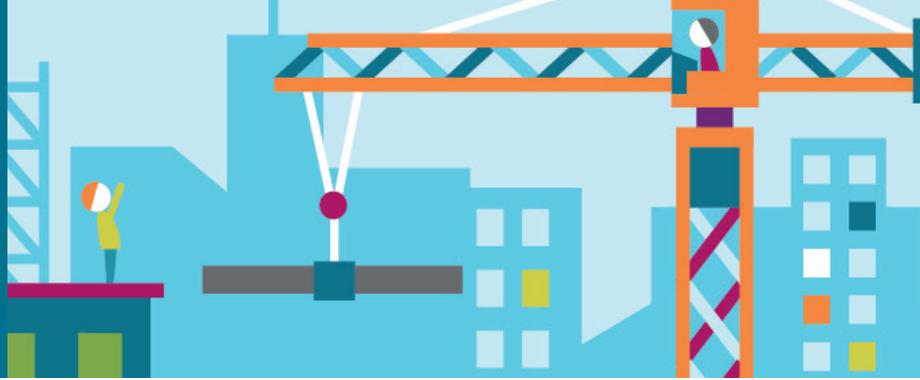


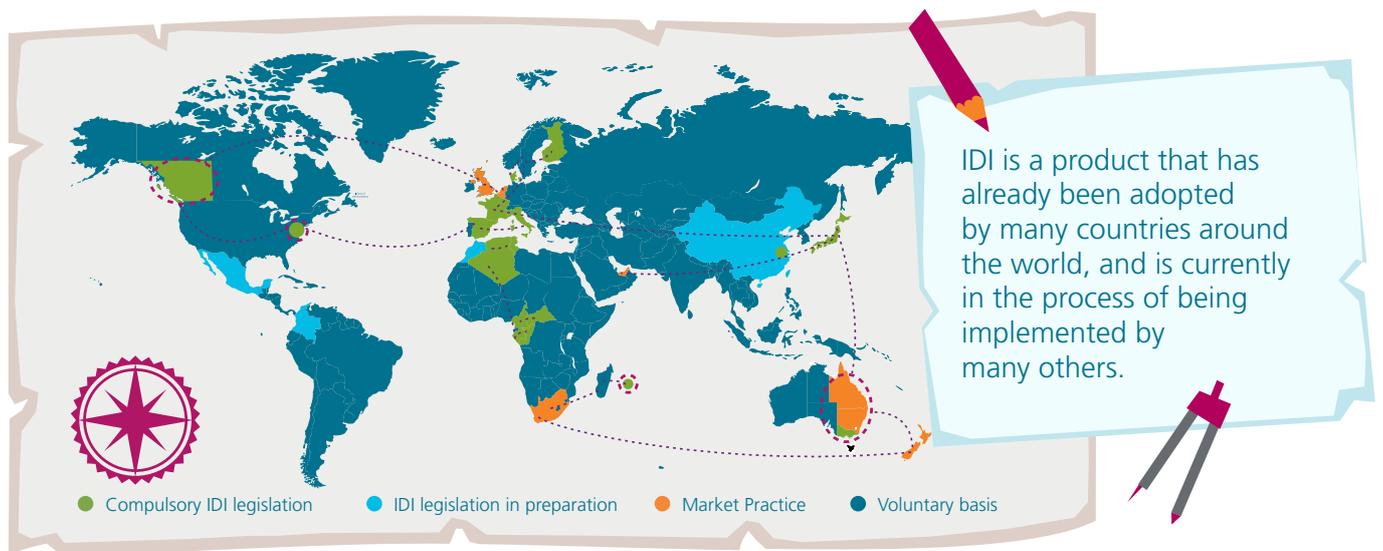


Technical Newsletter #27

July 2015



INHERENT DEFECTS INSURANCE (IDI) Overview and best practices



IDI Worldwide Insight

IDI is present throughout the world in different forms (warranty or insurance), whether on a compulsory basis or a voluntary one. However, regardless of the form it takes, IDI is based on the same principle: architects / engineers and contractors are liable for any defect threatening the solidity or safety of the insured construction for up to 10 years.

The development of IDI is easy to understand. Given the recent explosion of the global population, demand for housing, infrastructure and industrial plants has grown apace, and the land area naturally suited to building has shrunk. On top of this, as the general standard of living has risen in many parts of the world, people have come to expect higher standards of comfort. Consequently, builders have had to come up with imaginative solutions to new technical problems, and design materials to meet the new demands.

It follows that the more complex a construction project is, the more complex any potential associated problems could be, and the owners of such constructions sometimes find themselves in dire straits when their property has to undergo radical repairs or rebuilding work.

With this in mind, making significant real estate investments with no protection against potential construction defects or shortcomings can appear rather paradoxical.

Thus, we are witnessing a growing awareness of such risks around the world, which has led to the introduction of compulsory IDI into the legislation of several states.

"IDI IS A RESPONSE TO AN INCREASING DEMAND OF INVESTMENT PROTECTION."

In English-speaking countries,

A Housing Warranty system (compulsory or otherwise) is generally provided by builders' associations. This can be a pure warranty program or a mixture of warranty and insurance.

In the rest of the world,

Inherent Defects or Decennial Insurance (compulsory or otherwise) is more common. The product originates from the 1804 French Napoleonic Code, which inspired many other countries to develop their own civil codes and decennial systems.



The cover

IDI provides building owners but also construction companies with protection against damage caused by defects in design, workmanship or materials affecting the structure, external walls and roofs, and any consequential damages to non-structural works and equipment.

The basic cover also includes debris removal, as well as professional fees and any changes in the work repairs required to satisfy local authority or similar regulatory requirements.

Cover extensions can be contracted to include:

- > Waterproofing defects of the building envelop
- > Damages to some non-structural works due to a defect affecting them directly (partitioning, false ceiling, tiling, etc.)
- > Waiver of subrogation against the contractor/ designers

Claims may be raised if the defect was unidentified at the date of practical completion and the damage occurs during the 10-years cover period.

The cover may be tailored to a large range of projects, from small residential buildings to large industrial or commercial buildings. It can also apply to any public constructions such as hospitals, theatres, bridges, viaducts and tunnels.

For each tailor-made policy, we provide technical assistance in terms of defining and pricing the right underwriting policy.

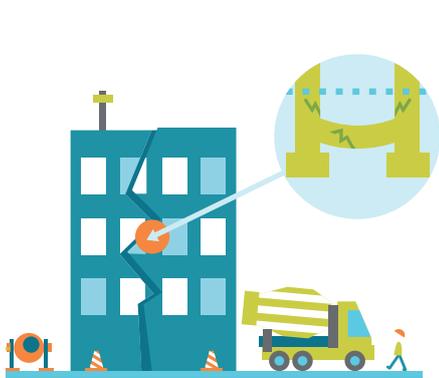
What is the sum insured?

The sum insured is the total rebuilding cost of the building at the date of inception of the policy. However the cost of professional/process equipment, furniture and external works is not included in the sum insured. The sum insured may be index-linked throughout the insurance period.



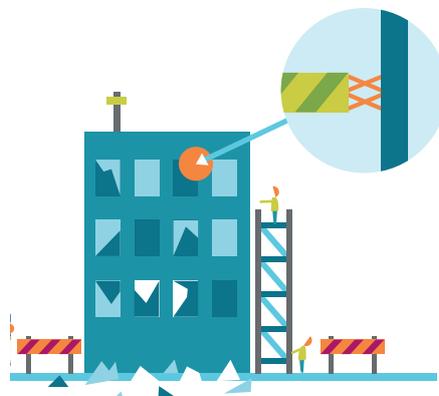
IDI COVER SCHEMATIC EXAMPLES

Structural damage



As an example:
Under-reinforced floor slab causing excessive strains in the structure. This may be due to a design or workmanship error.

Facade damage



Pieces of curtain wall glazing falling off the building. This may be caused by a workmanship error when fixing the façade piece, or by a faulty connector.

Collapse



The collapse of a building may be caused by faulty materials, design error, bad workmanship or a combination of these.

What are the benefits? The exclusions?

THERE ARE MAJOR BENEFITS TO IDI, AS LISTED BELOW:

- > The IDI policy is a first party policy and therefore compared to third party policy, fault or liability does not need to be proven, sparing the claimant from costly and time consuming litigations. This means that the building or construction can be returned to use with minimum interruption time
- > Cover is non-cancellable over the 10 year period
- > IDI cover is automatically transferrable to future and subsequent owners of the premises
- > For real estate, IDI is a sell/buy incentive as it provides an added layer of protection to the buyer's investment
- > IDI covers the total rebuilding cost of the building (value at the inception date of the policy)

FULL DETAILS OF EXCLUSIONS ARE CONTAINED IN THE POLICY BUT THE PRINCIPLE EXCLUSIONS ARE:

Excluded unless endorsed:

- > Defects in non-structural works and equipment
- > Defects due to structural alterations after inception
- > Deficient waterproofing

Firm exclusions:

- > Earthquake, storm, flood, etc.
- > Defects known prior to inception
- > Defects due to lack of maintenance or misuse
- > Consequential losses (furniture, process equipment, stocks, etc.)
- > Normal fire perils, war and kindred risks
- > Subsidence heave or landslip unless due to an inherent defect

Settlement



Foundation failure causing building settlement: possible causes include geotechnical or foundation design errors.

Waterproofing

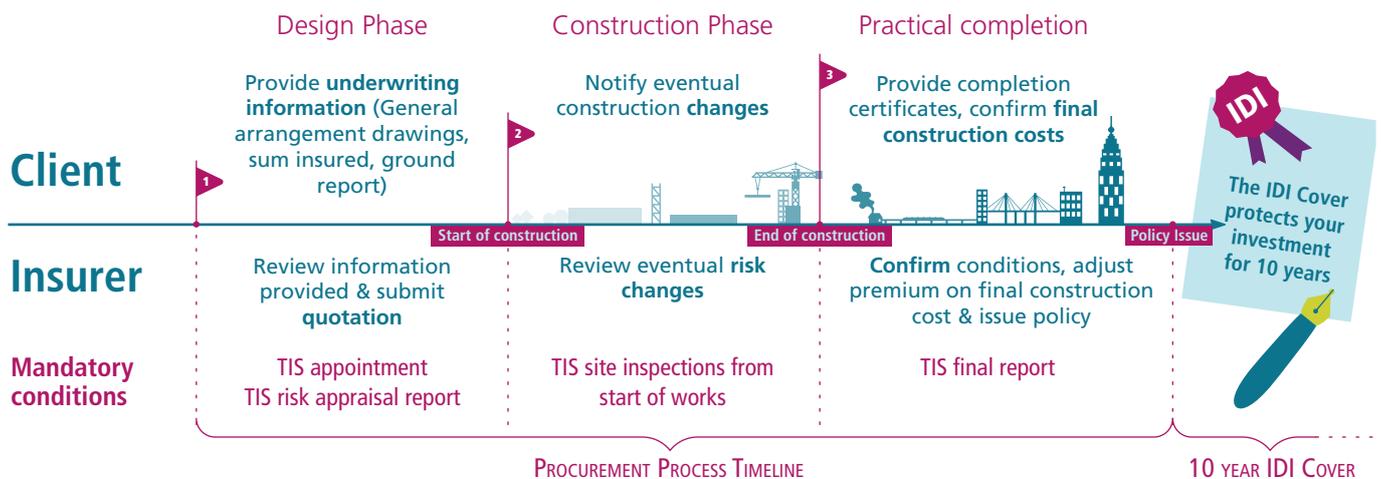


Failure of the waterproofing system causing water ingress through the roof. This may be caused by a workmanship error.



IDI Procurement Process and Technical Inspection Service Company (TIS)

KEY PHASES OF A CONSTRUCTION PROJECT



During the initial design review phase

The TIS conducts compliance checks to design standards and assesses structural adequacy. Then, the TIS prepares an initial risk appraisal report called the "RDO report" which must be provided to the insurer.

During the construction phase

The TIS conducts onsite inspections of works in order to check design compliance, and to review the quality control of supervision, materials and workmanship (a visit to the suppliers may be necessary for special items, i.e. preformed cladding units).

At practical completion

The TIS will issue a final report called the "RD6 report", which contains any observations and a final appraisal of the completed works. The period of insurance only starts if this report is provided to the insurer (this is a mandatory condition). When applicable, the TIS will conduct a post-construction waterproofing inspection and issue a supplementary report called "RD3 report".

The TIS is an engineering company solely dedicated to technical inspection, in order to ensure full independence and impartiality and to avoid conflicts of interest.

This is not the case for design consultancy firms, who may sometimes act as designers and checkers. The TIS is a company with high expertise and proven experience.

The role of the TIS is to conduct design reviews and on-site construction inspections, with the aim of detecting any defects prior to practical completion so that these can be rectified before the owner or developer takes over responsibility for the building from the contracting parties. The TIS only conducts checks; it is not empowered to interfere with the progress of the construction.

In order to receive a quote, the client must provide the insurer, before construction work starts, with its IDI requirements and the technical information set out below.

- > List of structures to insure
- > General arrangement drawings
- > Ground investigation report
- > Construction costs for each structure to insure
- > RDO report

During construction, the client must inform the insurer of any design / construction changes. The TIS reviews the changes.

At practical completion the following must be provided:

- > Taking over certificates
- > Final construction costs
- > TIS RD6 final report

The Insurer then adjusts the premium, confirms terms and conditions, and issues the IDI policy.

Reminder

It is recommended to budget for IDI at the tender stage and mandatory to appoint a TIS before starting construction works on site, to ensure that the insurer's requirements can be met.



How IDI improves quality of construction industry

Construction has always been a process of trial and error which should be managed.

The magnificent castles, mosques, bridges and cathedrals we see still standing today, after several hundreds of years, have survived because the techniques used to construct them were perfected over long periods, sometimes after their domes, vaults or arches had collapsed and caused major damage or even casualties. Following such accidents, the architects sought out the root cause and improved their techniques accordingly, reducing the risk of collapse to a minimum. Thanks to this iterative process, the quality of construction has been constantly improving for centuries.

“THE FREQUENCY AND ECONOMIC IMPACT OF CURRENT LOSSES ARE GREATER THAN IN THE PAST; HOWEVER THEY CAN BE LIMITED BY INTRODUCING INHERENT DEFECTS INSURANCE INTO THE PROCESS.”

Nowadays, trial and error is still very much present in the construction industry, which is constantly evolving towards more technically advanced projects and more optimized processes. Although the consequences of errors are not as dramatic as they were in the past, the risk of losses is still present today. The frequency and economic impact of current losses are greater than in the past; however they can be limited by introducing Inherent Defects Insurance into the process.

IDI virtuous circle

IDI procurement requires the appointment of a Technical Inspection Service Company (TIS), which identifies risks and therefore helps to reduce the losses exposures. Residual risks are covered by the IDI, providing protection to owners and builders and generating loss data. Thus, the procurement of IDI triggers a virtuous circle which results in the constant improvement of quality within the construction industry.



CONTROL

The Technical Inspection Service required to contract an IDI constitutes an investment. The **return on investment** consists of an improvement in quality within the construction industry over time, achieved by:

- > Monitoring the quality and durability of construction for the future **owner**
- > Raising awareness and knowledge of **designers** in terms of the choice of the most suitable techniques
- > Raising awareness and knowledge of **contractors** in terms of applying construction standards

FEEDBACK

IDI is also a way of monitoring losses during the 10 years following the completion of a construction. The feedback from many different kinds of constructions may constitute an extended statistical database, containing indicators of origin and recurrence.

These indicators allow:

- > Owners, designers and contractors to choose techniques and materials showing a good loss experience
- > The relevant authorities to develop and update standards and recommendations in order to prevent future losses

SANCTION

In many cases IDI is imposed by a market or by law. Contractors with a bad loss experience may have to face increased premiums or even the loss of the insurance coverage. The risk of these sanctions, which hinder the activity of contractors, is therefore a powerful incentive for them to improve the quality of their work.

SCOR Global P&C's IDI team is a longstanding market player

Our dedicated team offers longstanding and deeply rooted expertise in the global IDI market. This enables us to customize and build tailor-made coverage. Our significant capacity is backed by a large, diversified and strong Group.



Experience
in 56
countries



40
years

of IDI experience



Committed to sharing
and **building**
knowledge
with our clients

40
years

of SCOR Campus
seminars



100%

DEDICATED TEAM

“COMMITTED TO A CONSISTENT UNDERWRITING APPROACH OVER THE PAST 40 YEARS, OUR LEADING GLOBAL POSITION ENABLES US TO BE INVOLVED IN MOST IDI INITIATIVES LAUNCHED BY INSURERS, GOVERNMENTS, PROFESSIONAL ORGANIZATIONS OR FINANCIAL BODIES ACROSS THE WORLD.”



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