MANUAL

BUILDING WITH FSC® TIMBER

FROM POLICY TO IMPLEMENTATION















Preface



Dear reader,

The construction industry is increasingly focusing on sustainability. The awareness and importance of making responsible choices in sourcing of resources is continuously growing. Timber is the only mainstream 100% renewable building material. But to preserve our most ecological factories in the world – forests – a professional, responsible and sustainable forest management is necessary. Such forest management naturally strives for economic return, while respecting man and nature. This respect for social, ecological and economic interests is the basis for FSC.

Wood and paper products with the FSC label give you the guarantee that they come from responsibly managed forests, verified reclaimed materials and/or controlled sources.

Thanks to the many efforts of foresters and timber companies, more and more wood species and timber products are available with the FSC label. This makes it increasingly straight-forward for the sector to make a conscious choice for FSC certified timber products.

This guide is intended to support architects, builders and contractors to help make responsible choices and to provide knowledge and share examples on the use of FSC certified timber products.

We hope that this guide will inspire you and that your organization will choose FSC certified wood for your project.

President FSC Belgium

Head of the Wood Technology degree programme HoGent

Rein Vanlishout.







C © Altripan

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Content

Structure

This manual is primarily aimed at architects and builders, offering them an incentive to opt for FSC® certified wood in their construction projects. The manual provides the reader with practical information and tips to successfully put this in practice.

Throughout the guide, the different phases of a construction project will be touched upon, with suggestions and recommendations for the successful application of FSC wood in projects of all sizes.

At the end of each chapter a summarizing checklist can be found, where the reader can quickly find key information for each phases of the construction process.

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Cover: small photographs from left to right. © Wijma - © AR-TE / English - © Cederic Verhelst for Martens Van Caimere Architects © Theuma Photo big: © Bob Reijnders for BLAF Architects – FSC padouk cladding

Thanks to the European Sustainable Tropical Timber Coalition (STTC) for their support to the development of this guide.



The mark of responsible forestry FSC° F000202



Choose wood, choose FSC wood!

Wood is a beautiful, natural and renewable raw material with many advantages compared to other materials. An important condition is of course that you choose wood from sustainably managed forests. The FSC® label can give you this guarantee.

Leaving forest alone = the best guarantee for protection?

To protect forests, the best thing we can do is to leave them alone and not touch them, right? Stop using timber and paper, fence around them and be done? Of course you can protect forests by preserving them as forest reserves, but that obviously does not work everywhere or not equally well (protection on paper alone is often not enough). Of course you can protect forests by preserving them as conservation areas or forest reserves, but for that to work it must be ensured that these are not exploited and, unfortunately, protection on paper alone is often not enough. The use of forest products can definitely be a driver to preserve and protect forests properly. Timber production contributes to the economic value of a forest, and when the forest is seen as economically valuable, actors (land owners, forest managers etc.) will be less tempted to clear the forest to make room for other resources such as soy or palm oil. Using the forest, its services and products, in a responsible way is a good thing to do, and FSC certification can give such a guarantee. This allows the forest to deliver continuous production of wood and possibly other forest products, while respecting the ecosystem and local communities.

Tropical timber: we can use it, we should use it

Thinking that you are saving the tropical forest by avoiding the use of tropical wood is nonsense. Just the opposite is true!

By actively using FSC certified tropical timber, you give a real and economic value to tropical forests; stimulating responsible management with conservation of the ecosystem as well as numerous socio-economic benefits for the local communities.

Isn't it better to use domestically grown wood instead of tropical wood?

It's definitely a good thing to use domestically grown or local wood. But relying solely on domestic wood production or regions is not an option in many countries or regions, and at the same time tropical timber is well placed for a use in many applications. Many tropical timbers are exceptionally hard wearing and durable and can offer a long-lasting solution for demanding, external and particularly aquatic applications. By using tropical FSC certified wood, you give greatly needed economic value to sustainable forest management there. In many of these countries a lot of money is earned by cutting the forest away for livestock, agriculture (soy, palm oil, etc.) and mining. We must try to avoid this, by giving value to the forest as it is. Choosing FSC certified tropical timber is the best incentive we can give to stimulate the sustainably management of tropical forests.

Tropical timber must be brought here from far away: that can't be good for the environment?

Tropical wood indeed does not grow around the corner, and transport obviously has an impact. But these impacts (energy consumption, emissions ...) are often not as big as many think. Transport over sea has a much lower impact compared to transport over land by trucks. For example, the emission of the transport of a trunk from the port of Douala (Cameroon) to Antwerp (Belgium) consumes approximately 0.8 tons of CO₂, which is less than a similar transport by a truck from Budapest to Brussels. When you realize that that tree during its growth has absorbed around 7 tonnes of CO₂ from the air, the CO₂ emissions 'lost' during transport is relatively small. Forest management will gradually replace the tree, so the CO₂ balance remains positive.



© www.hallerbos.be - FSC certified forest in Belgium

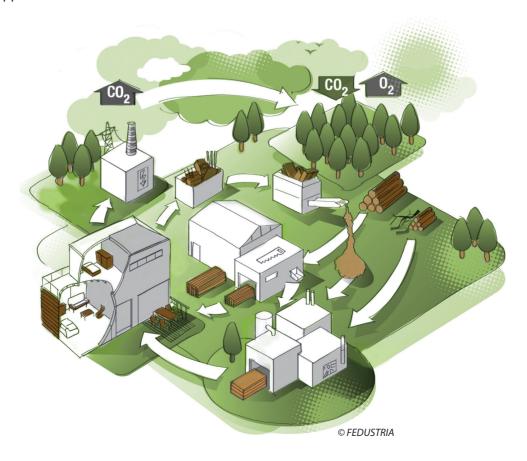
© FSC AC

Wood: natural, renewable and CO₂-friendly

Wood, when compared to many other materials, has many strengths:

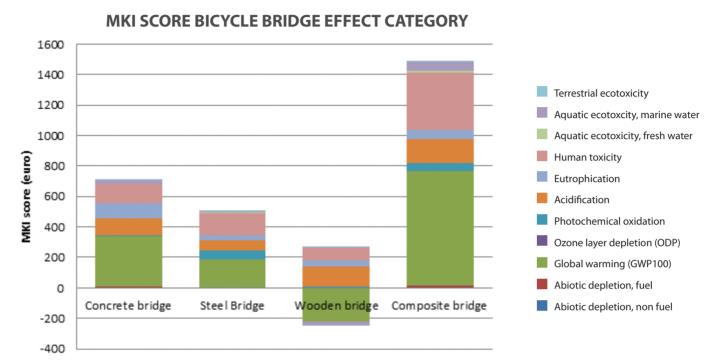
- Wood is a natural, renewable resource: when responsible forest management is applied, the timber that is harvested will be replaced by means of natural regeneration or planting.
- Wood can be easily reused or recycled: after fulfilling their duties wood products can easily be reused or recycled into other products.
 Even with woodwaste one can be creative, or it can be used to produce wood-based panels for many applications.

- Wood from sustainably managed forests can actually be better than carbon neutral.
 A growing tree absorbs CO₂ and produces oxygen which is very important in times of greenhouse gases and global warming.
 The CO₂ that is stored in wood products remains there throughout its lifetime.
 Only when the wood is burned, together with energy, the CO₂ is released again.
- Wood is easy to grow: generally easy to process, the energy and requirements during production are a lot lower than with other materials: 4 times less than concrete, 60 times less than steel and 130 times less than aluminium.
 - > More on the lower environmental impact can be found on page 3



Wooden bridge scores best in terms of environmental impact

Wood has the lowest environmental impact compared to steel, concrete or composite. Research conducted by BECO commissioned by the Dutch RVO showed that a wooden bicycle bridge has by far the lowest environmental impact. The study compares the environmental impacts of the various materials for a bicycle bridge with a lifespan of 50 years, and was developed in cooperation with industry organisations from the various sectors. For the wooden bridge, it was assumed that the Azobé wood was sourced from sustainable (FSC certified) forest management. The wooden bridge scores clearly as the best in terms of environmental impact in comparison to other materials. In 8 of the 11 measured environmental impacts wood has the smallest environmental impact, and in 3 aspects there is even a direct environmental benefit.



> More background information and conclusions can be found in the full report (in Dutch): <u>http://www.rvo.nl/subsidies-regelingen/projecten/vergelijkende-lca-studie-bruggen</u>

Tropical FSC timber will certainly be more expensive!?

Well, there you have a point. Tropical wood of the same wood species, with or without the FSC claim often has a price difference. This average currently fluctuates around 8 % for lumber (Belgian market, summer 2015). But is it so illogical that you would pay a little more for wood that does not come from illegal logging or overexploitation? Especially if it comes from a forest managed with respect for the forest ecosystem, proper working conditions, fair wages and direct benefits for the local community? A stolen bike is also cheaper than a bike bought in a normal store. By choosing FSC you are directly contributing to the preservation of forests and a better life for humans and animals depending on them. Worth the additional price, wouldn't you say?

"It's estimated that around 16% of the global industrial round wood market is FSC certified."

(FSC International, August 2015)



© TETRA - Visiterscenter at the port in Gent (Belgium) made of FSC certified Basralocus

7 essential tips for efficient use of FSC certified wood:

So, you want to build your projects with FSC certified wood? But what is it all about? This guide provides practical information at every stage of a construction project. The 7 tips below will give you a quick intro and lead.

Information, ambition and motivation

By choosing FSC certified wood, you are making a positive choice for forest conservation for people and society in the long term. Each actor involved in a building project, from the client, the architect to the companies involved can contribute.

Make visible to everyone - both within the organization as well as third parties - what your goals are and how your organization will achieve this. Clear targets contribute to a smooth implementation during the construction process.

Experience shows that the "active actors" in projects where FSC wood is used, are often enthusiastic about their project. Many are frightened at the beginning due to misunderstandings and lack of information. Therefore, it's important to pay attention during the entire construction process in order to maintain a good communication. The more knowledge about and support for the application of FSC timber there is at all levels and with all parties involved, the better the chance of a successful outcome.

FSC wood is readily available

A common misconception about FSC wood is that it's rarely available. Some wood species are indeed not (yet) or less readily available with the FSC guarantee. But the offer is growing rapidly, and in addition there are plenty of opportunities for all applications in residential and commercial construction, both for new construction and renovation. Also for other applications, such as in the civil engineering, there is a large offer already.

Every building project can therefore be made with FSC wood. Many wood and wood products are easily available from stock. Sometimes you have to take into account a longer delivery time, and if so ideally you can integrate this as early as possible in the planning phase of a project. And clearly, a contractor will sometimes have to be willing to turn to other than its regular suppliers.



© FSC AC

The right timber for the right application

Very often a limited range of timber species is used for a specific application. In some cases, the wood species has almost become synonymous with the application.

Think of decking and many people say bangkirai, and garden furniture should always be teak, no? This puts great pressure on the forests where these species originate and often leads to destructive forestry or depletion of the species. It is better to make use of a diverse range of what a forest can provide, and by doing so reduce the pressure on popular woods. This is especially the case in tropical forests where the variety of timber species is vast. Making a diverse use of clearly well suited timber-species will not increase the impact of forest management (it might even reduce the impact) and increases profitability.

The supply of 'lesser known timber species' in our market is increasing considerably, and offers opportunities for a variety of applications. Often they are not really unknown, as elsewhere experiences exist. It is mainly more a matter of 'getting to know'. Prescribing performance requirements and technical specifications instead of a specific wood species would offer many more options and can facilitate the use of FSC timber. By prescribing performance standards, it sometimes is also possible to combine different types of wood in one application.

The client is less dependent on the availability of a particular kind of wood. Of course, it remains possible to complement the performance requirements with examples of suitable types of wood, but it is important that other, similar suitable types of wood may find their way into the project.



© WWF UK - Benjamin Ealovega



© FSC AC



© JONA SUYS - WOEMA! -Isolation based on FSC certified wood fibers

Choose FSC timber for all wood applications

Sometimes people think that FSC is only applicable for wood from tropical forests. However, there are many types of wood available with FSC certification for all applications in construction, originating from sustainably managed forests in all climate zones (eg. coniferous wood from Scandinavia, or wood from other European forests).

By specifying the FSC label for all wood products and all applications, you can help promote responsible forest management worldwide.

Don't drop the FSC choice for the fear of extra costs

Good forest management entails costs. Illegal and irresponsible logging haven been pushing down timber prices on the world market for decades. For FSC certified wood, you will pay a fair price. Wood and wood products from our region, and many ordinary paper or tissue products are often not or only slightly more expensive. For tropical timber - especially unprocessed - the price difference for the same timber species with or without an FSC claim can be higher. On the Belgian market, a price difference between 5 and 10% can sometimes be expected. Typically, the additional costs for FSC timber when applicable, are not big compared to the total cost of a construction project. For example, if FSC certified timber for a window costs an extra 9%, then this would increase the price of the window by 3% or less.

Work with FSC certified companies

Set FSC Chain of Custody (CoC) certification as a requirement in the selection of suppliers and contractors. This should help to 'close the chain' by which the FSC guarantee is passed on. All trade links between forest and end-user are then verified by an independent certification body, safeguarding the traceability of FSC certified wood products. Working with FSC CoC certified suppliers and contractors helps by not only giving the right guarantee, it also saves energy and time spent on your monitoring and administration.

Need support? Contact your local FSC office

If you have questions or further needs, contact your local FSC office for practical information on FSC certification and information on FSC activity and certified companies on your local market.



About FSC®

FSC stands for Forest Stewardship Council®, an international non-profit organization founded in 1993 by forest owners, timber and paper companies, social movements and environmental organizations. Together with its members FSC is committed to responsible forest management worldwide.



© FSC Belgium - Chain of Custody

FSC: the guarantee of responsible forest management

FSC has formulated principles for responsible forest management covering ecological, economic and social aspects. Forests that are managed according to FSC principles and criteria can, after successfully passing an independent audit, achieve FSC forest certification.

The following aspects are verified in the field:

- Are the natural functions of the forest adequately protected by the forest management company and during the harvesting?
- Does the forest manager respects the rights of indigenous peoples living in and around the forest?
- Can forest workers count on good working conditions, and do they get a reasonable salary?

When all requirements are met, forest products that leave the forest can carry the FSC claim. Wood and other products from these forests can then be sold carrying the FSC stamp of approval.

> Only FSC certified companies can sell FSC certified products with the right guarantees

FSC certification: from forest to finished products.

The verification of responsible forest management and responsible logging occurs at the source: in the forest. When FSC certified timber leaves the forest, it begins a journey through the entire supply chain (chain of custody). Wood travels from the forest to a sawmill, is then shipped in by timber importers, sold to timber merchants and processors to end up with a carpenter or contractor who delivers the product to the end customer or places it in a building or home.

In order to ensure that the wood actually came from an FSC certified forest, the timber must remain traceable throughout the entire chain. This is achieved through FSC Chain of Custody certification on each of those steps. FSC certified companies ensure the traceability of FSC certified timber products within their business (both upon reception, storage and processing) and keep good records. Certified companies are independently audited (by an independent certifier) and if they pass the test, they get (or keep) their FSC certification. Each FSC Chain of Custody (CoC) certificate has a unique certificate code, linked to the certified company. The FSC certificate provides assurance that the supplying company (and previous companies) are following the provisions for dealing with FSC certified wood and allows the company to sell FSC certified timber products with the right guarentees.



© FSC Belgium - FSC certified forests in Cameroon

FSCAC

From the equator to boreal regions, you can find FSC certified forests.

Mid 2015 there were over 184 million hectares of forests certified worldwide, in some 80 countries. The map below shows a range of different stories across the globe where FSC certification has led to social, environmental and economic benefits. To find out more about FSC, check the website of your national FSC office or go to the website of FSC International.

This guide was developed by FSC Belgium with the support of the European Sustainable Tropical Timber Coalition to promote the use of FSC certified timber in Belgian construction industry.

> In case you need more information about FSC certification in your country, please contact the national or regional office.

The map below shows a range of different stories across the globe where FSC certification has led to social, environmental and economic benefits. To find out more about FSC, check the website of your national FSC office or go to the website of FSC International.



Growing number of FSC certificate holders around the world

Worldwide more than 29 500 FSC Chain of Custody certificates where in place in August 2015, representing over 50.000 FSC certified companies in more than 110 countries.

Awareness of the FSC brand

The brand recognition level of the FSC is already very high in some national markets like the Netherlands, the UK, Germany or Switzerland, where the recognition already is well above 50% or more.

The 3 different FSC claims and labels:



FSC certified timber or (wood) fibers



Controlled wood



Recycled timber or paper















MIX From responsible sources FSC® C117990



RECYCLED Made from recycled material FSC® C117990



FSC 100%

indicates that the product is entirely made from FSC certified material, only coming from FSC certified forests

FSC MIX

indicates that the product inputs represent at minimum 70 % FSC- worthy materials (from FSC certified forests or postconsumer recycled material). The other inputs should at minimum come from controlled sources.

FSC RECYCLED

indicates that the product is made entirely from recycled wood. (of which at least 85% is postconsumer recycled)





© FSC BEIGIUM -Shaving brushes 'FSC 100%' Iabel @ Bodyshop







© RAFT (UK) – furniture with



Excelsior Timber Company

Choosing good and sustainable wood!

Road to the Forest, 2 - 3220 Woodville T 0032 16 X2 X1 X7 F 0032 16 X0 X3 X6

Account number: 147-789612-14 Tax number: 0801.123.123

Aan:

Jack Timber Oak Bay Drive Colorado

Invoice number: 215/2012 Date: 14/02/2016 Reference: Jack Timber

| Code | Description | Quantity | Price | Total | |
|--|--|----------|--------------|----------|--|
| 12548/BD | Garden Fence 'Backyard' 180 x 180 cm – Tali – FSC 100% | 15 | 160 € / unit | 2400 | |
| 12477/DD | Particleboard 120 x 180 cm – 16 mm – FSC Recycled 85% | 12 | 18 € / unit | 216 | |
| 47841/NL | Summerhouse 'Bolivar' | 1 | 499 € / unit | 499 | |
| 11487/PP | MDF 244 x 122 cm – 18 mm – FSC Mix credit | 8 | 21 € / unit | 168 | |
| | On a 'correct FSC invoice' one can clearly recognise those products that are FSC certified , as they are clearly marked with an FSC claim (FSC 100%, FSC Mix (credit of >70%), FSC Recycled (>85% of credit). 3 out of 4 products on this invoice are FSC certified. | | | | |
| | | | | | |
| | | | Subtotal | 3283€ | |
| | | | | | |
| + Tax On a 'correct FSC invoice' the FSC Chain of Custody certificate code of the | | | | 196,98€ | |
| invoicing company needs to be mentioned clearly. This code can be checked on http://info.fsc.org | | | | 3479,98€ | |

Excelsior Timber Company is a certified company with FSC certificate number (AB-COC-123456

→ Only products identified as such in this invoice are FSC® certified.

If the FSC logo is also shown on the invoice (which is not obligatory), then this should carry the licensing code* of the company (this always looks like FSC C654321). In such cases, a disclaimer needs to be mentioned on the invoice to avoid confusion and provide clarity.

* Labelled products also carry a label with a licensing code. Also for this code, you can check the 'owner' on http://info.fsc.org



Policy - Goals and commitment -

The use of FSC certified wood in building projects starts with the formulation of objectives. This can be done at the project level, for a specific construction project that is coming up. But also at the organizational level if one wants the sustainable use of wood anchored in the policy. Formulating clear and concrete goals or agreements will provide a clear grip in all phases.

From the first project to full integration in the organisation

Consider whether an immediate or phased introduction of FSC certified timber is desirable and possible. For example, you could start with a first project and gain experience to extend this to another projects later. An important starting point, might be to make an inventory of the wood use within the organisation. Take a closer look where the use of FSC wood is easily possible or where it might be a bit more challenging and take both positive or negative experiences into account to learn from.

Organizations (such as local authorities, housing associations, project developers, etc.) who are considering formulating a policy on the use of certified wood, usually do well to orient themselves in advance, to check the possibilities. For example, you can look to other similar organizations and check how they are doing, or contact your national/regional FSC office for support.

Try to list the applications where you can specify FSC certified timber products and look at potential challenges (if any) that may lay ahead.

Involve other people in your organisation and – after dialogue – try to fix the organization's target for the use of FSC wood. Do not limit your purchasing policy to (tropical) hardwood, but define it for all timber and timber products. Responsible forest management is a global endeavour and FSC certified forests are located around the world. For all wood applications, there are FSC certified wood species and timber products available.

Formulating your policy or ambitions

Often the ambition to use FSC certified wood is linked to a more general (environmental) policy within the organization, for example in the field of sustainable building and corporate social responsibility.

The use of FSC certified timber and timber products in construction projects (or stimulation thereof) is a logical 'implementation step' of this policy.

Always ensure there is good integration between various colleagues, departments and levels of the organization. When all actors are effectively involved in the policy, the success rate rises accordingly. Integrate your ambitions for FSC certified wood as precisely as possible, not only in environmental policies, but also in standard requirements, procedures or manuals you might have.

Do not forget to include the FSC requirements in newly developed as well as existing supply contracts. It is essential that the FSC objectives are formulated as unambiguously as possible and that they are achievable and verifiable.

Policy implementation: from words to action

Appoint enthusiastic staff members from your organization to take the lead. This person can help those responsible for the implementation of the policy, ensuring information on the use of certified wood and monitoring implementation.

Pay attention to creating and maintaining support within the organization, through the sharing of information and training where needed. Inform and enthuse as many levels as







© FSC Belgium - FSC certified garden border

possible, and certainly those who are crucial for the implementation of the policy. If your organization consciously chooses certified wood, it can be a strong statement both within the organisation as well as to the outside world.

Inform relationships such as contractors and suppliers about the objectives and agreements on the use of FSC certified wood. For example, that for future projects FSC timber will be prescribed and that future contracts will be awarded to FSC certified companies. This gives time to those companies to anticipate future assignments with FSC requirements and - if needed - to start their certification process in time.

Architects

An architect can play a key role in the use of FSC certified timber and other wood products in a construction project. More and more customers are consciously specifying FSC-certified wood for their projects. As an architect, you can, if necessary, help with the correct integration of the FSC requirement in the specifications. Secondly, you also have a responsibility in the monitoring and control of the effective use of FSC certified timber products. Obviously, an architect can also be the initiator or the choice for FSC certified wood use, by proposing this to its customer.

©ARNE QUINZE - Tomorrowland @Boom (Belgium), bridge 'One world'





© FURBANICE- Courtyard office complex in Oudergem, Belgium



© WOUTER DE LAENDER voor Martens Van Caimere architecten Sustainable business center, Belgium



© SABLO - Dragonfly '- Zutendaal, Belgium



© BAARLE-HERTOG- Belgium, Bicycle bridge

SUSTAINABLE BUILDING

Wood: naturally the most sustainable building material

The use of wood has a prominent place in the concept of 'Sustainable Building'. Wood from sustainably managed forests indeed is a natural, renewable raw material, which has a low carbon footprint both during processing and during the use phase. In addition, a timber application can sometimes be reused, and in most of the cases allows easy recycling after use.

FSC wood use in LEED and BREEAM

Of course, the concept of 'Sustainable Building' goes beyond the use of certified wood. Sustainable use of materials, where wood certainly has its place, is only one aspect. 'Green Building' in recent years has known a quick growth also in the number of 'monitoring systems' and their use, in which LEED and BREEAM are probably the best known.

The use of FSC certified timber is a 'scoring element' in both systems. Where LEED is concerned, the FSC system is the only label for sustainable forest management which meets the demands of the system.

Useful websites on 'Sustainable Building'

- LEED: www.usgbc.org/leed
- BREEAM: www.breeam.org



PUBLIC PROCUREMENT

Governments not only are consumers themselves, they can also influence choices in third party projects. Having a policy which favours the use of FSC timber does not have to be limited to purchases and projects in the hands of governments. One can also have an effect on projects of other parties. Governments can, for example, have a stimulating role for the choice of FSC wood by other project developers, or directly affect the purchasing behaviour of private consumers.

Wood from sustainably managed forests in public procurement

More and more governments and local authorities - in Europe and worldwide – have a purchasing policy in which wood from sustainably managed forests is put forward. FSC certification can give them such a guarantee.

The inclusion of the requirement on sustainably managed wood' in public procurement policies and specification documents is obviously an important first step. But paying attention to the right guarantees upon delivery or project completion is at least as important: it is essential to work with FSC Chain of Custody certified suppliers and contractors, and to verify their delivery documents and invoices to check if they are in conformity.

Raising awareness

Cities and municipalities can also contribute in raising a awareness with their citizens and other local actors. Setting the good example, and demonstrating this by communicating about it, can clearly encourage others to choose FSC certified wood and paper products. In case you need support, check if your national FSC office can be of assistance. Through certain specific measuresor activities, a (local) government can stimulate the effective use of FSC certified wood products with their citizens or other actors. In Belgium some cities give financial support to inhabitants when they use FSC certified wood in exterior joinery. Other approaches to stimulate the use of certified wood include a targeted communication on certified wood at information desk (enviromental service, service buildings, etc.) in the town hall or in the communication related to the delivery of building permits.



CHECKLIST POLICY

For all parties

Before you start

- Check how you can integrate the requirement for the use of FSC certified wood and wood products in your technical specifications (ask for advice when needed)
- Make an inventory of the wood consumption within the organization and check (where needed) the availability in your local market with the FSC guarantee
- Set realistic targets for the use of FSC certified wood and wood products (eg. can you immediately switch or is it better to phase it in gradually increase afterwards)
- Choose FSC certification for all your wood applications

Formulating policy

- Set clear and realistic goals
- Link your goals around the use of FSC certified wood if possible with existing, more general (environmental) policy objectives and ensure proper integration with it.

Execution

- Appoint someone within your organisation who is motivated and enthusiastic to take the lead on this subject within your organisation and give her/him a supporting role in the implementation of policies
- Create broad support within the organization, through information and other communications
- Check in advance how you will monitor and control the use of FSC wood
- Inform other stakeholders (suppliers, ...) about ambitions and agreements on the use of FSC wood certification so that they can anticipate.

Design

During the design phase, the designing architect or engineer makes his move. In consultation with the client, the architect or engineer needs to translate the expectations and requirements - including those concerning the use of wood certified FSC - into the design.

Selection of an architect, engineer or designer

The first step in this stage is the selection of a designer. Experience shows that enthusiasm can be one of the key elements for success. Therefore choose a designer that is clearly open to the use of FSC certified wood, or even passionate about it.

The need to have experience in working with FSC certified timber in projects is not an absolute must, but clearly can be an advantage. Of course the architect, designer or engineer can himself play a decisive role by informing the client and convincing them to choose for FSC certified wood and wood products.

The right timber for the right application

Often out of habits market demand for a specific application is quite limited to one or a small number of timber species. Some wood species are even so strongly 'established' that they almost become synonymous for the application. Bangkiria for terraces and Azobe for timber in waterworks are perhaps amongst the best examples. For joinery our blind love goes to species like Meranti or Afrormosia. Although those known and preferred wood species nowadays are also available with the FSC mark, this might still be in limited volumes. Moreover, for all those applications there are plenty of other suitable timber species which are also available with FSC certification, sometimes even in bigger volumes of under better conditions. Instead of prescribing the wood species, it would be better to specify the relevant wood characteristics. Wherever possible and known, it is a wise thing specify the performance requirements and optimize the choice of wood.

Be open to the use of lesser known species

The range of wood species available with the FSC mark has grown considerably in recent years. Among these are in addition to traditionally known timber species also quite a number of 'new' and lesser known species.

Meanwhile, many of those lesser known timber species are already quite well known for applications in many uses. Yet unknown often wrongly remains unloved. After all, each of these wood species are qualitative wood species, usable for a variety of applications. Often they can constitute a viable alternative to "traditional" wood species. Using those lesser known species can also contribute tremendously to a better sustainable forest management. > see also page 17

Allow a mix of different wood species where possible

In many cases, a range of diverse wood species can be considered for use in a particular application. By allowing a mix of different timber species, where feasible, this can facilitate the use of FSC certified wood considerably. Clearly one can only do this with the right timbers species and when the application allows it. Especially within the infrastructure sector (civil engineering and naval constructions) there are already many examples of projects where a mixture of different wood species was used.



 $@\mathit{FSCAC\text{-}Collection}\mathit{oftimberwithFSClabel}\\$



© MARTENS VAN CAIMERE ARCHITECTS

© FSC Belgium

Thought out design

Through thoughtful and differentiated design, one can be cost-effective and facilitate the use of FSC certified wood. Avoid for instance, the oversizing of wood elements. For instance, try to avoid oversized wooden elements and avoid specifying timber with a high durability class when this is not needed. A smart design for maintenance of weather sensitive constructions can in some cases lower the needs for a higher durability class.

The design phase: Be open, creative and flexible

The following guidelines provide an architect or engineer support in specifying FSC for the design

Integrating the FSC requirement in the specifications:

- Make sure you correctly include FSC in the specifications > More info on this in the next chapter.
- Ask for FSC certification all wood applications

There are many types of FSC certified timber and wood products, so it can be prescribed for all applications FSC wood.

Do not limit the FSC requirement to outside joinery, but also specify it for cladding, roofing and other construction wood, insulation, stairs, doors and windows, floors, skirting boards

> Focus chapters further in this manual go deeper on this.

> New techniques for efficient wood use

Thanks to innovative techniques in the field of wood processing and wood treatment there are many more options to make efficient use of wood. These innovative applications can directly and indirectly contribute to a more thought-through use of wood, and can even lead to a more profitable forest management.

Wood treatment

There are several relatively new techniques, such as heat treatments or other techniques, to bring timber species from a low durability class towards a higher durability class.



Laminated wood

Laminating and finger jointing techniques can increase the efficiency of the use of harvested timber. Smaller pieces of wood can indeed be combined into larger components with such techniques into new beams or construction elements with the necessary stability and strength, and often perfectly tailored to the needs.





LESSER KNOWN SPECIES

A treasury of biodiversity

Tropical forests are characterized by a huge diversity of animal and plant species, and this surely also counts for the variety of timber species. Often you can find hundreds of different tree species within only a a few hectares. Still traditionally, only a few timber species are really used commercially, which not rarely leads to destructive consequences.

Commercial timber species, overexploitation and depletion

Often a few tropical timbers species are intensively commercialised mostly because of their good and known properties, their large dimensions, and sometimes also because they are easily available in larger quantities and/or within a broader region. Unfortunately, our preference for a limited number of wood species often has consequences in terms of forest management. Logging is often only focussed on these wood species, and little attention is given towards other trees and the forest ecosystem, that often remain seriously damaged.

Destructive logging for a select number of species is often the practice, with two major consequences. First, thoughtless exploitation will lead to gradual depletion of preferred species. Second, the forest will be more open, allowing others a way to go deeper into the forest to cut or completely deforest the land for agricultural purposes.

Sustainable forest management = responsible use of the diversity of the forest

When sustainable forest management is truly applied, one needs to make a profitable but balanced use of the resources that the forest has to offer. Instead of just focusing on wood species that are strongly desired by the international market, it also means a more diverse use of the forest. In an FSC certified forest a good inventory gives the forest manager a good view of what the forest has to offer, not only on the short term but also further into the future. By not only looking at those more preferred tree species, but by taking into account other suitable species the forest manager can harvest the forest in a much more efficient way. By taking the right necessary precautions (eg. cutting lianas before tree felling, reflecting on the direction of the felling ...) the forest manager can reduce the impact of logging to a minimum, even if more timber species are up for selective logging (one to a few trees per hectare). The diversification of harvested timber species can also allow the forest manager to 'use' less forest cover on an annual basis, while maintaining the volumes needed for a profitable operation.

Promote them, learn to use them!

Lesser known timber species are of course not randomly chosen, but selected on the basis of their appearance, properties and use applications. We are talking about good and suitable wood species, that can often be a worthy alternative to the more commercially known wood species in many applications. Lesser Known Species are more and more present on the market, and one needs to learn to use them. The sooner we start using – and appreciating them – the better. Often those lesser known species are only lesser known to us, but already well known in their region of origin. They might be 'lesser known' now, but this quickly changes.



Orient yourself and ask for advice when needed

Take time to orient yourself to the range of FSC woods, their application, availability, cost and delivery times. Make use of specialised information or ask experts for help when needed.

If needed, contact suppliers that specialize in FSC certified wood products, as they can probably give you precies information on FSC timbers species, technical specifications, potential applications, availability, cost and delivery times. When prices are concerned, it is always good to ask for more than one offer to allow a comparison.

> For questions or needs, it might be a good idea to contact your local FSC office.



© MARTENS HOUT

Useful websites

- www.woodforgood.com
- www.lesserknowntimberspecies.com



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CHECKLIST DESIGN

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For clients:

Selection and progress:

- Try to choose a motivated architect / designer who is eager to build with FSC certified wood
- Emphasize the requirement to use FSC certified wood to the designer
- Point the architect / designer at tools available for guidance on the use of FSC certified timber products.
- Check if the designs takes into account the use of FSC certified timber products

For designers / architects:

Design:

- Build time for orientation in terms of capabilities, availability, cost and delivery times of FSC certified wood products
- Make sure you have a 'thought-out' design and choose 'the right stuff in the right place'
- Make sure to integrate the FSC requirement into the specifications in a good and clear way (see next section)
- Make use of available tools, documentation and other information

Tendering & specifications

A good specification is critical for a smooth implementation FSC certified wood products in a project. The contractor and potential subcontractors will use this as a basis for their work and obligations. It is important that the client ensures that specifications for the use of FSC certified timber products are clearly taken into account. Errors in this stage often lead to difficulties later, that are often not easy to fix.

Specifications

If the FSC requirements are clearly and unambiguously formulated in the specifications, the contractor (construction company, carpenter, etc.) should know exactly what to do to make a smooth use of FSC certified wood products in the project. At the same time, it is important to give the contractor some flexibility in the execution of the work, for example around the precise choice of timber species used.

Writing the specifications in practice is a task of the designer or architect (specifier), in some projects in consultation with the contractor. The designer must be aware of the functional suitability, availability and delivery of the timber products that are included in the specifications .

Communicate the FSC requirement clearly

The following elements should be integrated in the specifications:

- All wood products (or paper products) are FSC certified
- The applicant is in possession of a valid and company-own FSC Chain of Custody (CoC) certificate
- The invoice complies with the following requirements: it clearly identifies FSC certified timber products with a valid 'FSC claim' and the FSC CoC code of the invoicing company is integrated. This code is of the form: ABC-COC-XXXXXX (+ Optionally one or a few letters).

> Note that for public procurement it may be appropriate or needed to use specific fixed formulas. Check relevant sources where necessary.

Integrate such FSC specifications for every product or application where timber is prescribed. One can also integrate such specifications in the general provisions, to make the applicable for all wood use. Even in such a case, it might be good to repeat or draw attention to this in specific subsections, in order to avoid (sub)contractors overlooking it.

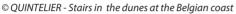
Emphasize the importance of FSC Chain of Custody Certification

Integrate in your specifications the condition that the supplier/contractor must have a valid and company-own FSC Chain of Custody certification, and that you expect to receive the right FSC guarantees (through proper FSC invoice, see fictitious example at page10). Non-certified firms who have been selected can still take steps to achieve FSC Chain of Custody certification in time in order to deliver the goods/project with the right guarantees for the use of FSC certified timber products.

Be flexible in your choice of wood species

When possible do not specify by wood species, but by relevant technical properties or performance requirements, such as durability classes. These performance requirements can be complemented by a number of examples of suitable species. The inclusion of performance requirements rather than specific names of wood species offers a greater choice in available wood species, and can prevent discussions and problems later in the process. When relevant, one can include other additional product requirements, for example on colour or finishing.







© ESKRA BOUW - FSC certified cladding in Wijnegem, Belgium

Choice of contractors

When tendering for contractors, you can include the requirement for FSC certification (or the willingness to do so) in the specifications. It can be important to communicate this well and even draw specific attention to it towards interested contractors. Well-informed contractors will clearly know your expectations and can prepare themselves properly to deliver you upon them.

Communicate as a client or architect as much as possible about the intended use of FSC wood. If needed, you might even add extra information on the use of FSC certified timber products in the project documentation. Sometimes contractors have certain prejudices about working with FSC wood. These are often misunderstandings or the result of a lack of information about the possible additional cost of FSC wood, certification costs, availability and delivering times. The architect or the client can often easily take away such misunderstandings at this stage and give the contractor relevant information or refer to sources of information.

If needed, one can again emphasize at the signing of the contract the use of FSC certified wood and related specifications (where all FSC certified wood applications are circumscribed). Remind the contractor if needed on the possible longer delivery times: not all wood species, sizes or quantities are always immediately available. The contractor must therefore take timely action. Ideally the client tries to ensure enough time between the awarding phase and the actual start of the construction works,

> Only companies (traders, contractors, ...) with a company-own and valid FSC certificate are independently checked on the traceability of their FSC certified wood products. Only certified companies can supply or place FSC certified products with the proper FSC claims and guarantees.



The importance of FSC Chain of Custody certification

An essential part of the FSC system is the principle of a 'closed supply chain' or Chain of Custody.

This means that not only the forest of origin is independently audited against the FSC Principles and Criteria of responsible forest management, but also that there is a check throughout the supply chain that can pass on the FSC guarantee from the forest to the final consumer.

Only when each company in the chain has a valid FSC Chain of Custody certification the proper traceability is guaranteed from the forest to the final product.

Each FSC certified company in this Chain of Custody is minimally audited once a year by an external independent auditor, who will check what is needed. This includes checks on the traded volumes of FSC certified products (purchases, sales...) as well as close attention to all critical points within the company.

> More information about certification: www.ic.fsc.org





ONE CLAIM IS NOT THE OTHER

The FSC brand is not the only trademark that delivers a message of support to responsible forest management worldwide. Other systems exists and they also have their merits, and often they are also accepted in public procurement of other purchasing policies. The FSC system however is currently regarded as the most stringent system of its kind worldwide.

In fact, leading environmental organizations such as WWF and Greenpeace currently refer to FSC as the only system that offers a credible guarantee for the responsible management of forest worldwide.

In addition to labels on sustainable forest management, there are many other claims or labels that deliver guarantees on the legal origin of timber products. A legal origin obviously should be a condition, and although important as a first step, it does not necessarily guarantees the sustainable forest management.



CHECKLIST SPECIFICATION AND TENDER

For clients:

Specifications and conditions

- Refer architects where needed to the existence of the standardised specification texts to include FSC requirements
- Verify where needed if the requirements for the use of FSC certified products are
 properly included, and if the condition for FSC Chain of Custody certification at
 supplier/contractor level is included in the specifications, according to the guidelines
 described in this chapter
- Integrate damages clauses in the contract that can be used in the case when proper guarantees for the use of FSC certified timber are absent or insufficient

Tendering procedure

- Emphasize when needed to suppliers or contractors that FSC certified wood products are requested and point them to relevant specifications where needed
- Explicitly integrate as a selection criterion that the contractor needs to have a company own, valid FSC CoC certificate in order to deliver the right guarantees on the use of FSC certified timber > Refer contractors to FSC's website at international or national level in case they need more information on FSC certification.

For designers and architects:

- Use existing specifications to integrate the requirements for the use of FSC certified timber or make use of the guidelines in this manual
- Include a clear and unambiguous specification for the use of FSC certified timber and timber products and avoid where possible the specification by timber species but use technical properties and/or performance requirements instead

Implementation

At this stage of the construction process, the responsibility for the use of FSC certified timber and timber products mostly lies with the actors that are actively involved in the constructing. The contractor especially has a big responsibility in this stage. Of course, both the architect and/or the client need to pay close attention through proper follow-up and checks.

Information & communication

During the execution of a project, the responsibility primarily lies with the contractor, but also the architect or supervisor has a key role to play. It is important that the architect is well aware of the agreements on the use of FSC certified wood products and the potential consequences for the process. Longer delivery times might be the case for specific needs in FSC certified timber products.

A good transfer of information amongst those involved during the construction phase therefore is essential. The more people in the project (including subcontractors and suppliers) feel involved and informed, the smoother the project will proceed. A good information exchange and coordination can really increase support of actors involved in the building site. Experience shows that when those involved know more about FSC, that this can increase their motivation and enthusiasm to achieve the objectives.

It is therefore important to pay attention early in the construction process for good information transfer at all levels. This responsibility may lay with the client, the architect or the construction company, or a combination of them.

In addition to internal communications amongst the project partners, the construction phase also brings options for external communication. The client, architect and/or construction company can potentially bring the FSC ambitions of the project under the attention of a wider audience.

Progress

The architect verifies if the contractor in its planning and preparation schedule takes into account realistic delivery times from the FSC certified timber products, and that orders are timely placed. If needed, the architect can allow adjustments to the work schedule. Surely the availability of FSC certified wood products has grown considerably in recent years, there might still be cases in which an extra effort to search and find the right products is needed. This might lead to some more flexability in delivering times. This can especially be the case when larger or less frequently used dimension are demanded, or when very big volumes are needed. A good communication between the contractor and his suppliers is key here, e.g. to allow anticipation at supplier level so that stock adjustments can be foreseen.

Clearly it is advisable that the client and/or architect keep a close look at the project. Having someone to represent the client in a good way is key in order to stay informed of the decisions taken there. Clearly the architect has his role, but there are plenty of good reasons for the client to also participate in construction progress meetings, especially if the client will also be the user or manager of the project.

Making FSC timber use a regular item on the agenda of construction progress meetings is a good idea. The contractor can keep the architect (and client) updated on the status of orders, planning and other related issues. Regular coordination can also prevent unpleasant organizational or financial surprises and can provide a platform for a timely search for solutions.



© SERVAEGE - Producing FSC certified joinery

© JONA SUYS voor Woema! - Roof construction in FSC certified lumber

All parties have committed themselves to the use of FSC certified wood products. The client has the final decision or say in this. One should be aware that there might be situations where one needs to stick to the plan in order to avoid that ambitions on the use of FSC certified wood are downgraded. Client is king: so put your foot in the ground if needed! It is important that all parties involved in the implementation remain consistent when deliveries or plans unexpectedly go wrong, and that everybody stays committed to the use of FSC certified timber products.

Supervision and inspection

Is the wood (product) which has been used on site effectively FSC certified as agreed?
As mentioned above, one only has adequate assurance if the contractor has a company-own and valid FSC FSC Chain of Custody certificate.
FSC certified companies are in fact independently audited, and are supposed to take the necessary steps to ensure traceability and the use of FSC certified wood.

The FSC certified contractor must see to it that he receives timber and timber products with the appropriate FSC guarantees. Upon delivery on the construction site, the architect (during construction progress meetings), can keep an eye on this too by checking if deliveries indeed arrive with the right guarantees.

Especially important is to pay close attention to invoices (and their annexes) from the contractor to the client: FSC certified timber product need to be properly declared with their correct FSC claim and the FSC Chain of Custody code of the certified contractor needs to be mentioned.

If the contractor is not (yet) FSC certified, then the company can give no formal guarantees on the use of FSC certified timber. In this case the clients can try to make certain checks to verify at most if the timber products indeed are FSC certified, but this will require more time and effort without necessarily giving the right guarantees. In order to make some checks possible, it is important that the non-certified contractor can present incoming invoices from (FSC certified) suppliers or subcontractors that can then be checked.

What and where?

More information about the control aspect:

If you work with FSC certified contractors and suppliers, you can check their FSC Chain of Custody certificate (by their name or number) on: http://info.fsc.org if needed.

If the contractor is not (yet) FSC certified, he strictly spoken does not meet the specifications. In such cases it is crucial that you can have access to invoices from suppliers or subcontractors to the contractor, that then can be checked.

What if in doubt or possible abuse?

If you are unsure if a company is correctly FSC certified or not, e.g. because you cannot find them on the above mentioned website, please do not hesitate to contact FSC: contact your national office or – if not present in your country – take contact with FSC International.

The London 2012 Olympics is one of the most well-known 'FSC certified projects': two-thirds of the wood that was used was FSC certified.



© OLYMPIC DELIVERY AUTHORITY - Velodrome, London 2012

Project Certification

Project Certification can be of relevance for bigger projects where there is no main (FSC certified) contractor, or where more than one contractor is operating. A project manager, normally within the building project coordination, takes a central coordination role internally in the project as well as towards the external certification body. Logically it remains crucial that all supplies of FSC certified timber or timber products with the FSC label come from are delivered or placed by FSC CoC certified companies, and that their transportation documents and invoices are properly checked. > More information: ic.fsc.org or fsc-uk.org



CORRECT FSC INVOICE

Semi-finished products (eg. sawn timber, woodbased panels) or customized products (eg. joinery in a building, doors or office furniture, etc.) are rarely physically labelled. The guarantee that such products are FSC certified is given by the invoice. Only FSC certified companies can deliver such 'correct FSC invoices', as these companies are independently audited on the traceability of FSC materials within their company. In other words, companies that do not hold a valid FSC Chain of Custody certificate cannot deliver a formal guarantee for FSC certified products. Therefore, this advice: work only with FSC certified companies and check their invoices for the right FSC guarantees. > For a fictitious example of a correct invoice, see page 10.

Unique FSC certificate code

Every FSC certified company (eg a construction company, timber merchant, carpenter,) has a unique FSC certificate number. The number consists of three parts: the abbreviation of the certifier, followed by the letters CoC (Chain of Custody), and finally a number code (with or without additional code letter).

Through this international database of FSC certificates *http://info.fsc.org* anyone can check whether a company holds a valid FSC certificate, for example by searching if a specified certificate code effective refers to the company in question. The database also allows you to check which kind of products or services the company can deliver with proper FSC guarantees.

FSC certified companies need to state their company-specific certificate code on their delivery notes and invoices when FSC certified products are concerned. The actual FSC certified products mention on such documents need to be clearly identified by the mentioning of one of the existing FSC claims (FSC 100%, FSC Mix or FSC recycled).



For clients / architects:

Information and communication

- Ensure good communication about FSC certification (when needed) and the FSC ambitions of the project to all involved parties
- When possible participate in construction progress meetings
- Make the use of FSC timber into a regular agenda item in those construction progress meetings

Progress

- A good coordination and collaboration amongst those involved in the project will increase chances of success
- Keep track of the planning regarding the implementation of FSC timber.
 If problems should arise, try to work out a timely solution together with the contractor
- Put your feet in the ground if needed: be consistent and do not lower the ambitions for the use of FSC certified wood products when deliveries or progress is not according to scheme

Visibility and Control

- Ensure that orders for FSC certified timber products are timely placed by the contractor.
- Ensure a good administrative check in terms of the FSC supplies: in case the contractor is not FSC certified you need to build in more controls and ask and check documentation and proofs of purchases from subcontractors and suppliers

For the contractor:

- Book and order on time the FSC wood products that are needed, and take possible longer delivery times (when needed) into account in the work schedule
- You might need to look further than only your regular suppliers by contacting other FSC certified suppliers where needed
- have a regular contact, especially for large projects, with your suppliers in order to anticipate deliveries or additional orders
- Keep your client up to date where and when needed on the progress of the use of FSC certified timber
- Check the appropriate administrative data when ordering FSC certified timber products, as well as upon delivery (shipping documents, invoices)
- Ensure proper storage and processing of FSC timber and timber products on site in accordance with FSC guidelines where needed
- Be consistent when deliveries and processing does not go according to

And then...

The completion of a construction project is a logical time to bring the FSC objectives further under attention inside and outside the organization. As a client, you have every right to be proud of your achievements by using FSC certified timber. And your story might inspire others. And maybe the work is not finished as in the maintane (and later renovation) you might again make choices for the use of FSC certified products. And then the cycle.

Communication

For all organizations that are involved in a construction project where FSC timber products where used, the delivery can be an opportunity for both internal and external communication.

Communication about a successful project can increase the support within the organization. Your project using FSC certified timber can be a model project in the field of sustainable construction or even a 'business card' for corporate social responsibility. And it surely can demonstrate your commitment for a responsible sourcing of wood products. If the project was completed by FSC certified contractors and/or under a valid FSC project certification, one can easily integrate the FSC trademarks in all communication related to the project. Certified companies and/or project certificate holders can contact their certification body for further information.

Would you as an architect or client want to communicate about the use of FSC certified wood in your project(s), you can also contact the national FSC office in your country for information about the options.

Share knowledge and experience with colleagues and peers outside the organization. A good example can convince others to make similar choices.

Maintenance and renovation

Even with the completion of a new project, the story is not finished. In the management and maintenance of a project, or during renovations, FSC certified products can be used again. Integrate the use of FSC certified wood and paper products - if not already done so – can also be done here.

Policy

After the delivery, it is also time for feedback and evaluation within the organization. What can be done better next time?

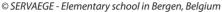
A next project using FSC certified timber can go even smoother, as the way of working becomes more and more a routine. Relations with suppliers and contractors might continue in the future and the use of FSC certified timber can quickly be the new norm.

Use the organizational learning from your experiences and make improvements where needed in your policies and practices. Think ahead and define new goals and new projects.

A successful first project can also be the occasion to strengthen the ambitions for the use of FSC certified wood products. If not all wood use was FSC certified, then maybe next time it might be?

© ARTICO- auditorium Brussels (Belgium)







© WOUTER DE LAENDER voor MARTENS VAN CAIMERE ARCHITECTEN Sustainable business center in Maldegem, Belgium



CHECKLIST: AND THEN...

For all parties involved:

- Generate publicity for the project's use of FSC certified wood products upon completion.
- Use a successful project for internal communication as it can increase the internal support
- Share knowledge and experience with colleagues and peers outside your organization
- Think ahead: define new goals and new projects

For clients:

- Involve the (end) users in the completion and seize this moment to inform them about your objectives and successful implementation of the use of FSC certified timber products.
- Evaluate the experiences from the project and use lessons learned to optimize policies and protocols
- Integrate the use of FSC wood if not already done in the management (maintenance and renovation)

For architects:

 Talk about your projects in FSC certified timber: your good story might convince others to follow your example

Focus

- Infrastructure works, road building and hydraulic engineering -

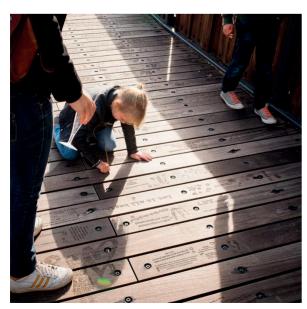
Although projects in civil engineering also follow the same steps as described before, it is nevertheless useful to give some more attention to this sector. After all, by the specific nature of the work - and the required volumes and sections of wood - extra tips and information can be welcome.

Policy

Tropical timber with a high natural durability is often used in civil engineering as those timber species are well suited to face the heavy conditions to which the infrastructure is exposed too. As these wood species are often coming from regions where a sustainable forest management is of vital importance, the use of FSC certified timber is well in place here.

Design

Given the nature of such applications, often larger volumes of timber not rarely in larger dimensions (in thickness and length) are needed. While until recently the supply of FSC certified tropical hardwoods for such applications was still quite scarce, their availability has seen a positive change during the last years. However, it might still be advisable to take into account an appropriate delivery time.



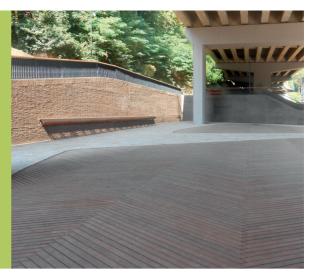
© ARNE QUINZE - One World: pedestrian bridge in FSC certified Okan at Tomorrowland 2014 > - http://arneauinze.com

Already in the design and planning phase, one can take measures that can simplify the use of FSC certified wood considerably:

- Check whether the necessary wood and wood sections are available on the market with FSC certification, and if not check for the availability of alternatives
- Be open to the use of lesser known timber species
- Allow a mixed use of different wood species with similar properties. For many applications using different wood species with similar characteristics is a very realistic option. Minor aesthetic differences - where they occur – often fade away quite quickly once the construction is ready.
- Avoid oversized or large volumes of the wood elements in the design. Of course, the security (carrying capacity, strength, etc.) should be respected, but going too far herein can result in unnecessary thick wood dimensions, or unnecessarily large volumes requested.
- By making some simple design changes, one can reduce the exposure to weathering.
 By doing so, the used timber species might have a lower durability class need, and this can increase availabilities and lower costs.
- In some cases, one can also use wood from a lower durability class, when a project is not intended to have a evity or when the timber is permanently located below the waterline.



© FSC Belgium -Sluice of Ivoz-Ramet in FSC certified Afzelia



© VAN RAAK- Leuven, project in FSC certified Massaranduba & Iroko

Specifications and tendering

If the specifications gives some flexibility, for example on the eligible wood species, it might be easier for a contractor or supplier to positively respond to a demand.

Also recommended is to keep the time between offering-phase and the awarding-phase as short as possible and (if necessary) the period between the contract awarding and the start of the works as long as possible. When companies make their offer, they do this on the basis of current market opportunities. When they are contracted soon afterwards, these market opportunities are often the same or similar, and the contractor can quickly place his orders. When the contracting phase takes longer, market opportunities might have changed. In such cases, it is advisable to give sufficient time to the contractor to place his orders and look for alternatives if needed. Adding such kind of flexibility can increase the successful implementation of FSC wood.



© QUINTELIER - Beveren - Hof Ter Saksen

Execution

As with all FSC projects it is crucial that one works with FSC Chain of Custody certified companies.

More and more contractors in civil engineering industry have an FSC CoC certificate in place, while others are likely to get certified when their clients show a clear interested for it.

And then?

If you have successfully completed a project with FSC certified timber, it might be the perfect opportunity to communicate about it. If the project in itself is "publicly accessible" there might even be good opportunities to do this 'on site'? As always, communication can also take place in different kinds of information channels that are within reach.



 $\ \, \ \, \bigcirc \,$ QUINTELIER - Construction in the dunes at the Belgian coast

Focus

- FSC interior applications

Many clients think of FSC wood for their outdoor and construction applications, and they hardly realize that there are also many options to use FSC timber products inside a building. In this short chapter specific attention is given to the most relevant interior applications where wood plays a key role.

Customization

Several FSC certified companies, including carpenters and interior designers can produce a whole range of interior custom applications. Just think of all kinds of interior joinery, furniture tailored to the needs or the complete interior furbishing.

Wooden flooring

The availability and diversity of FSC certified wood-based flooring is already quite large, ranging from laminate to parquet flooring of all kinds. These possibilities are especially large if one has some flexibility on the exact choice of wood species.

Interior carpentry

Choosing FSC wood for interior joinery applications such as stairs, doors, walls, ceilings, baseboards or mouldings is ever-increasingly easy.

© CEDERIC VERHELST for MARTENS VAN CAIMERE ARCHITECTEN

For some products you might need to look a bit harder still to find the right supplier for the right product.

Furniture

The range of standardised furniture for homes or offices is also rising noticeably. Already, there are many FSC certified furniture factories able to supply FSC furniture, and surely others will follow. and many others here are fully engaged.

Interior design: from home to shop

More and more interior designers, carpenters and project developers are able to offer complete interior made with FSC certified wood products, both for homes as for offices or shops. Again it helps if you as a client can be flexible in your exact choices of materials, as well as where needed by allowing some flexibility in time.



© PAR-KY: FSC parquet Shinnoki Milk Oak White

FSC Certification

- From forest to business -

FSC certification guarantees that products come from responsibly managed forests that are independently controlled in accordance with strict requirements, and that products carrying an FSC claim are traceable from the forest to the end consumer.



© FSC Belgium - FSCcertified forest at Brussels

Forests

FSC forest certification is possible for all types of forests anywhere in the world. A forest can be FSC certified if the forest management successfully passes an annual independent audit, in which the forest management is checked on social, ecological and economic criteria. The timber and possibly other forest products can then be sold as 'FSC certified'.

> For more information about FSC forest certification or Chain of Custody certification, please check: https://ic.fsc.org



© FSC Belgium - FSC logo at the entrance of certified forest.

Business

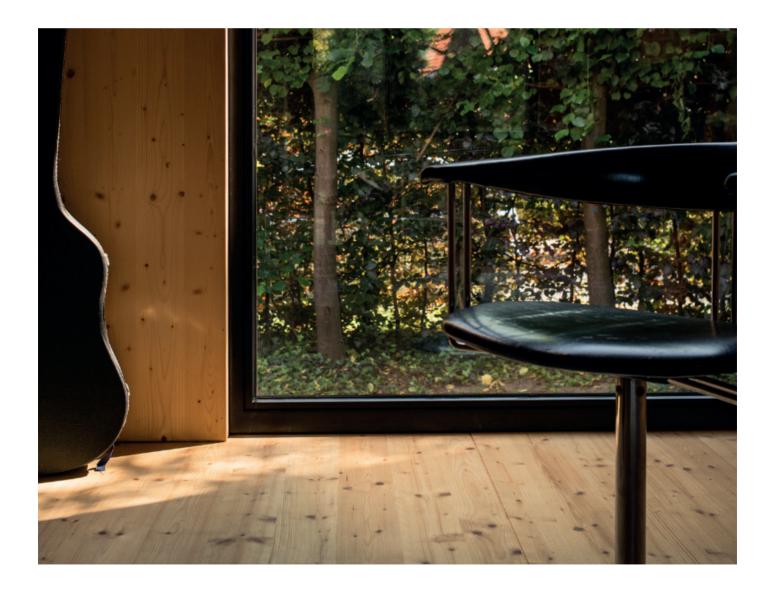
When wood and forest products leave an FSC forest, they are often at the beginning of a long and complex road. Wood and paper indeed usually pass through several companies before they end up as the final product in the hands of a customer.

FSC Chain of Custody certification is a way to check FSC certified materials throughout the supply chain. When every company part of such a supply chain is FSC certified, the traceability of FSC products from forest to end product can be guaranteed.



© FSC Belgium - Wooden placard: 'Welcome to a FSC certified company'





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