


# STEEL REUSE CHECKLIST

 <b>TECHNICAL CONSIDERATIONS</b>	
Specify steel reuse and set contractual requirements	
Conduct pre-demolition audits to identify which structural steel can potentially be reused, their condition, and quantities and potential age	
Determine a demolition approach to recover steel sections, and consider health and safety implications	
Assess the ability of using existing equipment for steel reuse	
Conduct the processing of reclaimed steel, including removing existing fittings, fixing holes, removing coatings and paints, etc.	
Manage testing, certification, and quality assurance of the reclaimed steel, following the SCI P427 protocol	
Record and keep material information (such as drawings from the demolished/refurbished building, age of the structure, original certificates, grade and material properties of steel sections, records of inspection and tests conducted, etc.)	
Consider any warranty and insurance issues	
Inspect and fabricate reclaimed steel sections	
Consider the aesthetics of the steel structure, particularly if it will be exposed in a building, taking into account that reclaimed steel might have surface imperfections such as marks and holes from its previous use	
Ensure that required holes are marked clearly to avoid inadvertent use of the wrong holes during assembly on site if reclaimed steel has spare holes and attachments	
Design the steelwork based on available reclaimed steel sections. Consider design efficiency. Allow for design iterations. Consider tolerances in design.	
Assess embodied carbon savings from steel reuse	
Ensure that new buildings are designed to be suitable for future reuse.	

Demolition Contractor	Stockholder	Steel Contractor (Fabricator)	Steelwork Erector	Main Contractor	Cost Consultant/Project Manager	Designer	Client
							
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# STEEL REUSE CHECKLIST

## SUPPLY CHAIN CONSIDERATIONS

Consider the availability of reclaimed steel sections
Consider the procurement route of reclaimed steel e.g. who will buy and own the steel
Consider lead times for business processes such as recovering steel from demolished buildings, fabrication, initial processing, testing, designing, procurement, etc.
Evaluate the possibility of project delays and mitigate these risks
Ensure sufficient space for storage of reclaimed steel
Consider transportation issues of reclaimed steel to and from the project site, in case of space constraints (e.g in central London projects)

## ECONOMIC CONSIDERATIONS

Determine payment agreement for reclaimed steel
Evaluate any potential increase in labour and equipment costs
Assess potential cost increase in case of project delays
Determine material costs/savings related to reclaimed steel
Consider cost of testing and certification for reclaimed steel
Evaluate potential increased design costs, including additional design fees in case of design iterations and more coordination and planning required

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Consider the availability of reclaimed steel sections	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Consider the procurement route of reclaimed steel e.g. who will buy and own the steel	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Consider lead times for business processes such as recovering steel from demolished buildings, fabrication, initial processing, testing, designing, procurement, etc.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Evaluate the possibility of project delays and mitigate these risks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Ensure sufficient space for storage of reclaimed steel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Consider transportation issues of reclaimed steel to and from the project site, in case of space constraints (e.g in central London projects)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Determine payment agreement for reclaimed steel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evaluate any potential increase in labour and equipment costs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Assess potential cost increase in case of project delays	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Determine material costs/savings related to reclaimed steel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Consider cost of testing and certification for reclaimed steel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Evaluate potential increased design costs, including additional design fees in case of design iterations and more coordination and planning required	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>